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

FORM 8-K

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

Date of Report (Date of earliest event reported): March 13, 2015

Minerva Neurosciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-36517
(Commission
File Number)

26-0784194
(I.R.S. Employer
Identification No.)

1601 Trapelo Road
Suite 284
Waltham, MA
(Address of principal executive offices)

02451
(Zip Code)

(Registrant's telephone number, including area code): (617) 600-7373

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

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

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 1.01. Entry Into a Material Definitive Agreement.

On March 13, 2015, Minerva Neurosciences, Inc. (the “Company”) entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain accredited investors (the “Investors”), pursuant to which the Company, in a private placement, agreed to issue and sell to the Investors (the “Private Placement”) an aggregate of 6,281,661 shares of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), at a price per share of \$4.81 (the “Shares”), and warrants to purchase up to an aggregate of 6,281,661 shares of Common Stock at a purchase price of \$0.125 per share of Common Stock subject to the warrant, with an initial exercise price of \$5.772 per share (the “Warrants”), for gross proceeds of approximately \$31 million (the “private placement”). The Company retained Jefferies LLC as the exclusive placement agent for the private placement and agreed to pay Jefferies a fee equal to 7.0% of the aggregate gross proceeds from the private placement plus the reimbursement of certain expenses. The Company will use the net proceeds from the private placement for advancement of its pre-clinical and clinical programs, research and development and general corporate purposes.

In connection with the private placement, the Company also entered into a Registration Rights Agreement, dated March 13, 2015 (the “Registration Rights Agreement”) with the Investors. Pursuant to the terms of the Registration Rights Agreement, the Company is obligated to prepare and file with the Securities and Exchange Commission (the “SEC”) a registration statement (the “Registration Statement”) to register for resale the Shares and the shares of Common Stock issuable upon exercise of the Warrants (the “Warrant Shares”) on or prior to May 2, 2015.

The Warrants will expire on March 18, 2017, two years after the date on which they were initially issued. Prior to expiration, subject to the terms and conditions set forth in the Warrants, the holders of such Warrants may exercise the Warrants for shares of Common Stock by providing notice to the Company and paying the exercise price per share for each share so exercised.

The foregoing descriptions of the Purchase Agreement, the Warrants and the Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the form of Purchase Agreement, the form of Warrant and the form of Registration Rights Agreement, which are filed as Exhibits 10.1, 10.2 and 10.3, respectively, to this Current Report on Form 8-K and incorporated herein by reference.

The representations, warranties and covenants contained in the Purchase Agreement, the Warrants and the Registration Rights Agreement were made solely for the benefit of the parties to the Purchase Agreement, the Warrants and Registration Rights Agreement and may be subject to limitations agreed upon by the contracting parties. Accordingly, the Purchase Agreement, the Warrants and the Registration Rights Agreement are incorporated herein by reference only to provide investors with information regarding the terms of the Purchase Agreement, the Warrants and the Registration Rights Agreement and not to provide investors with any other factual information regarding the Company or its business, and should be read in conjunction with the disclosures in the Company’s periodic reports and other filings with the SEC.

Item 3.02 Unregistered Sales of Equity Securities.

Pursuant to the private placement described in Item 1.01 of this Current Report on Form 8-K, which description is incorporated by reference into this Item 3.02 in its entirety, on March 18, 2015, the Company sold the Shares and the Warrants to “accredited investors,” as that term is defined in the Securities Act of 1933, as amended (the “Securities Act”), and in reliance on the exemption from registration afforded by Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated under the Securities Act and corresponding provisions of state securities or “blue sky” laws. Each of the Investors represented that it was acquiring the Shares and the Warrants for investment only and not with a view towards, or for resale in

connection with, the public sale or distribution thereof. Accordingly, the Shares, the Warrants and the Warrant Shares have not been registered under the Securities Act and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act and any applicable state securities laws.

Neither this Current Report on Form 8-K nor any exhibit attached hereto is an offer to sell or the solicitation of an offer to buy shares of Common Stock, Warrants or other securities of the Company.

The form of Purchase Agreement, the form of Warrant and the form of Registration Rights Agreement are filed as Exhibits 10.1, 10.2 and 10.3, respectively, to this Current Report on Form 8-K and are incorporated herein by reference.

Item 8.01 Regulation FD Disclosure.

On March 18, 2015, the Company issued a press release announcing the closing of the private placement which is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
10.1	Form of Securities Purchase Agreement, dated March 13, 2015, by and among Minerva Neurosciences, Inc. and the investors referenced therein.
10.2	Form of Warrant to Purchase Common Stock of Minerva Neurosciences, Inc.
10.3	Form of Registration Rights Agreement, dated March 13, 2015, by and among Minerva Neurosciences, Inc. and the investors referenced therein.
99.1	Press release of Minerva Neurosciences, Inc. dated March 18, 2015.

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.

MINERVA NEUROSCIENCES, INC.

By: /s/ Mark Levine

Name: Mark Levine

Title: Vice President, General Counsel and Secretary

Date: March 18, 2015

INDEX OF EXHIBITS

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SECURITIES PURCHASE AGREEMENT

SECURITIES PURCHASE AGREEMENT (the “**Agreement**”), dated as of March 13, 2015, by and among Minerva Neurosciences, Inc., a Delaware corporation, with its principal offices at 1601 Trapelo Road, Suite 284, Waltham, MA 02451 (the “**Company**”), and the investors listed on the Schedule of Buyers attached hereto (individually, a “**Buyer**” and collectively, the “**Buyers**”).

WHEREAS:

A. The Company and each Buyer is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**1933 Act**”), and/or Rule 506 of Regulation D (“**Regulation D**”) as promulgated by the United States Securities and Exchange Commission (the “**SEC**”) under the 1933 Act.

B. Each Buyer wishes to purchase, and the Company wishes to sell, upon the terms and conditions stated in this Agreement, (i) that aggregate number of shares of the Common Stock, par value \$0.0001 per share, of the Company (the “**Common Stock**”), set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers (which aggregate amount for all Buyers together shall be 6,281,661 shares of Common Stock and shall collectively be referred to herein as the “**Common Shares**”), and (ii) a warrant to acquire up to that number of additional shares of Common Stock set forth opposite such Buyer’s name in column (4) on the Schedule of Buyers (the “**Warrants**”), in substantially the form attached hereto as Exhibit A (as exercised, collectively, the “**Warrant Shares**”).

C. Contemporaneously with the execution and delivery of this Agreement, the parties hereto are executing and delivering a Registration Rights Agreement, in substantially the form attached hereto as Exhibit B (the “**Registration Rights Agreement**”) pursuant to which the Company has agreed to provide certain registration rights with respect to the Common Shares, and the Warrant Shares under the 1933 Act and the rules and regulations promulgated thereunder, and applicable state securities laws.

D. The Common Shares, the Warrants and the Warrant Shares collectively are referred to herein as the “**Securities**”.

E. In connection with the offering and sale of the Securities, the Company has entered into an engagement letter dated March 6, 2015 (the “**Engagement Letter**”) with Jefferies LLC (the “**Agent**”).

NOW, THEREFORE, the Company and each Buyer hereby agree as follows:

1. PURCHASE AND SALE OF COMMON SHARES AND WARRANTS

(a) Purchase of Common Shares and Warrants. Subject to the satisfaction (or waiver) of the conditions set forth in Sections 6 and 7 below, the Company shall issue and sell to each Buyer, and each Buyer severally, but not jointly, shall purchase from the Company on the Closing Date (as defined below), the number of Common Shares as is set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers, along with the Warrants to acquire up to that number of Warrant Shares as is set forth opposite such Buyer’s name in column (4) on the Schedule of Buyers (the “**Closing**”).

(i) **Closing.** The date (the “**Closing Date**”) and time of the Closing shall be 7:00 a.m., New York City time, on March 18, 2015 (or such later date as is mutually agreed to by the Company and each Buyer) after notification of satisfaction (or waiver) of the conditions to the Closing set forth in Sections 6 and 7 below at the offices of Covington & Burling LLP, New York, New York.

(ii) **Purchase Price.** The aggregate purchase price for the Common Shares and the Warrants to be purchased by each such Buyer at the Closing (the “**Purchase Price**”) shall be the amount set forth opposite each Buyer’s name in column (5) of the Schedule of Buyers.

(b) **Form of Payment.** On the Closing Date, (i) each Buyer shall pay its Purchase Price to the Company for the Common Shares and the Warrants to be issued and sold to such Buyer at the Closing, by wire transfer of immediately available funds in accordance with the Company’s written wire instructions and (ii) the Company shall deliver to each Buyer the Common Shares (allocated in the amounts as such Buyer shall request) which such Buyer is then purchasing hereunder along with the Warrants (allocated in the amounts as such Buyer shall request) which such Buyer is purchasing, in each case duly executed on behalf of the Company and registered in the name of such Buyer or its designee.

2. BUYER’S REPRESENTATIONS AND WARRANTIES.

Each Buyer represents and warrants with respect to only itself that:

(a) **No Public Sale or Distribution.** Such Buyer is acquiring the Common Shares and the Warrants, and upon exercise of the Warrants will acquire the Warrant Shares issuable upon exercise of the Warrants, for its own account and not with a view towards, or for resale in connection with, the public sale or distribution thereof, except pursuant to sales registered or exempted under the 1933 Act; provided, however, that by making the representations herein, such Buyer does not agree to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act and pursuant to the applicable terms of the Transaction Documents (as defined in Section 3(c)). Such Buyer is acquiring the Securities hereunder in the ordinary course of its business. Such Buyer does not presently have any agreement or understanding, directly or indirectly, with any Person (as defined in Section 3(p)) to distribute any of the Securities.

(b) **Accredited Investor Status.** Such Buyer is an “accredited investor” as that term is defined in Rule 501(a) of Regulation D. Such Buyer has executed and delivered to the Company a questionnaire in substantially the form attached hereto as Exhibit C (the “**Investor Questionnaire**”), which such Buyer represents and warrants is true, correct and complete.

(c) Reliance on Exemptions. Such Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Buyer's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Buyer set forth in the Transaction Documents in order to determine the availability of such exemptions and the eligibility of such Buyer to acquire the Securities.

(d) Information. Such Buyer and its advisors, if any, have been furnished with all materials relating to the business, finances and operations of the Company and materials relating to the offer and sale of the Securities that have been requested by such Buyer. Such Buyer and its advisors, if any, have been afforded the opportunity to ask questions of the Company. Neither such inquiries nor any other due diligence investigations conducted by such Buyer or its advisors, if any, or its representatives shall modify, amend or affect such Buyer's right to rely on the Company's representations and warranties contained herein. Such Buyer understands that its investment in the Securities involves a high degree of risk and is able to afford a complete loss of such investment. Such Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities. Such Buyer confirms and agrees that (i) it has independently evaluated the merits of its decision to purchase the Securities, (ii) it has not relied on the advice of, or any representations by, the Agent or any affiliate thereof or any representative of the Agent or its affiliates in making such decision, and (iii) neither the Agent nor any of its representatives has any responsibility with respect to the completeness or accuracy of any information or materials furnished to such Buyer in connection with the transactions contemplated hereby.

(e) No Governmental Review. Such Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(f) Transfer or Resale. Such Buyer understands that except as provided in the Registration Rights Agreement: (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder, (B) such Buyer shall have delivered to the Company an opinion of counsel, in a form reasonably acceptable to the Company, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (C) such Buyer provides the Company with reasonable assurance that such Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A promulgated under the 1933 Act, as amended, (or a successor rule thereto) (collectively, "**Rule 144**"); (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and further, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the Person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other Person is under any obligation to register the Securities under the 1933 Act or any state securities laws or to

comply with the terms and conditions of any exemption thereunder. The Securities may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the Securities and such pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document, including, without limitation, this Section 2(f).

(g) Legends. Such Buyer understands that the certificates or other instruments representing the Common Shares, the Warrants and the Warrant Shares, until such time as the resale of the Common Shares and the Warrant Shares has been registered under the 1933 Act as contemplated by the Registration Rights Agreement, shall bear any legend as required by the “blue sky” laws of any state and a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such stock certificates or other instruments):

NEITHER THE SECURITIES REPRESENTED BY THIS INSTRUMENT NOR THE SECURITIES FOR WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL, IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

The legend set forth above shall be removed and the Company shall issue a certificate or other instrument without such legend to the holder of the Securities upon which it is stamped, if, unless otherwise required by state securities laws, (i) such Securities are registered for resale under the 1933 Act, (ii) in connection with a sale, assignment or other transfer, such holder provides the Company with an opinion of a law firm reasonably acceptable to the Company, in a form reasonably acceptable to the Company, to the effect that such sale, assignment or transfer of the Securities may be made without registration under the applicable requirements of the 1933 Act, or (iii) such holder provides the Company with reasonable assurance that the Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A.

(h) Validity; Enforcement. The Transaction Documents have been duly and validly authorized, executed and delivered on behalf of such Buyer and shall constitute the legal, valid and binding obligations of such Buyer enforceable against such Buyer in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

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

(j) Short Sales. Between the time such Buyer learned about the offering contemplated by this Agreement and the public announcement of the offering, such Buyer has not engaged in any short sales or similar transactions with respect to the Common Stock, nor has such Buyer, directly or indirectly, caused any Person to engage in any short sales or similar transactions with respect to the Common Stock. Such Buyer shall not engage in any short sales involving the Securities in violation of the 1933 Act. Notwithstanding the foregoing, in the case of a Buyer that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Buyer's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Buyer's assets, the representation set forth above shall apply only with respect to the portion of assets managed by the portfolio managers that have knowledge about the financing transaction contemplated by this Agreement.

(k) No General Solicitation and Advertising. Such Buyer represents and acknowledges that is has not been solicited to offer to purchase or to purchase any Securities by means of any general solicitation or advertising within the meaning of Regulation D under the 1933 Act.

(l) Rule 506(d) Representation. Such Buyer represents that it is not a person of the type described in Section 506(d) of Regulation D under the 1933 Act that would disqualify the Company from engaging in a transaction pursuant to Section 506 of Regulation D under the 1933 Act.

(m) Residency. Such Buyer is a resident of that jurisdiction specified below its address on the Schedule of Buyers.

(n) Brokers. There is no broker, investment banker, financial advisor, finder or other Person which has been retained by or is authorized to act on behalf of such Buyer who might be entitled to any fee or commission for which the Company will be liable in connection with the execution of this Agreement and the consummation of the transactions contemplated hereby.

(o) Disclosure by Agent. Such Buyer has read the disclosure attached hereto as Exhibit D.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to each of the Buyers that:

(a) Organization and Qualification. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation and has the corporate power and authority to own, lease and operate its properties and to conduct its business as now being conducted and to enter into and perform its obligations under the Transaction Documents and the Engagement Letter. The Company is duly qualified as a foreign corporation to transact business and is in good standing in the State of New Jersey and the Commonwealth of Massachusetts and each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or to be in good standing would not reasonably be expected, individually or in the aggregate, to have a material adverse effect on the condition (financial or otherwise), earnings, business, properties, operations, assets or liabilities of the Company and Mind-NRG S.A. (the "**Subsidiary**"), considered as one entity (a "**Material Adverse Effect**").

(b) Subsidiary. The Subsidiary has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation and has the power and authority (corporate or other) to own, lease and operate its properties and to conduct its business as now being conducted. The Subsidiary is duly qualified as a foreign corporation to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. All of the issued and outstanding capital stock or other equity or ownership interests of the Subsidiary have been duly authorized and validly issued, are fully paid and nonassessable and are owned by the Company free and clear of any security interest, mortgage, pledge, lien, encumbrance or adverse claim except, in each case, as contemplated by that certain Loan and Security Agreement, dated as of January 16, 2015, by and among the Company, Oxford Finance LLC and Silicon Valley Bank (the "**Credit Agreement**"). The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the Subsidiary and Minerva Neurosciences Securities Corporation.

(c) Authorization; Enforcement; Validity. The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement, the Registration Rights Agreement, the Irrevocable Transfer Agent Instructions (as defined in Section 5), the Warrants and each of the other agreements entered into by the parties hereto in connection with the transactions contemplated by this Agreement (collectively, the "**Transaction Documents**") and the Engagement Letter and to issue the Securities in accordance with the terms hereof and thereof. The execution and delivery of the Transaction Documents and the Engagement Letter by the Company and the consummation by the Company of the transactions contemplated hereby and thereby, including, without limitation, the issuance of the Common Shares and the Warrants and the reservation for issuance and the issuance of the

Warrant Shares issuable upon exercise of the Warrant have been duly authorized by the Company's board of directors and, except as otherwise set forth in this Agreement, no further filing, consent or authorization is required by the Company, its board of directors or its stockholders. This Agreement the other Transaction Documents (other than the Warrants, which shall be executed and delivered on the Closing Date subject to the conditions set forth in this Agreement and in the other Transaction Documents) and the Engagement Letter have been duly executed and delivered by the Company, and constitute the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(d) Issuance of Securities. The Common Shares and the Warrants are duly authorized and, upon issuance in accordance with the terms hereof, shall be validly issued and free from all preemptive or similar rights, taxes, liens and charges with respect to the issue thereof and the Common Shares shall be fully paid and nonassessable with the holders being entitled to all rights accorded to a holder of Common Stock. As of the Closing, a number of shares of Common Stock shall have been duly authorized and reserved for issuance which equals or exceeds 100% of the aggregate of the maximum number of shares of Common Stock issuable upon exercise of the Warrants. Upon exercise in accordance with the Warrants, the Warrant Shares will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights, taxes, liens and charges with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. Assuming the accuracy of each of the representations and warranties set forth in Section 2 of this Agreement, the offer and issuance by the Company of the Securities is exempt from registration under the 1933 Act, subject to a timely filing of a Form D pursuant to Regulation D, if applicable.

(e) No Conflicts. Neither the Company nor the Subsidiary is in violation of its respective charter or by-laws, or is in default (or, with the giving of notice or lapse of time, would be in default) ("**Default**") under any indenture, loan, credit agreement, note, lease, license agreement, contract, franchise or other instrument (including, without limitation, any pledge agreement, security agreement, mortgage or other instrument or agreement evidencing, guaranteeing, securing or relating to indebtedness) to which the Company or the Subsidiary is a party or by which the Company or the Subsidiary is bound, or to which any of their respective properties or assets are subject (each, an "**Existing Instrument**"), except for such Defaults as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. The Company's execution, delivery and performance of the Transaction Documents and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Common Shares and Warrants and reservation for issuance and issuance of the Warrant Shares) (i) have been duly authorized by all necessary corporate action and will not result in any violation of the provisions of the charter or by-laws of the Company or the Subsidiary as currently in effect (ii) will not conflict with or constitute a breach of, or Default or a Debt Repayment Triggering Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or the Subsidiary pursuant to, or require the consent of any other party to, any Existing Instrument, except for such conflicts, breaches, Defaults or Debt Repayment Triggering Events or liens, charges, encumbrances or consents that would not reasonably be expected,

individually or in the aggregate, to have a Material Adverse Effect and (iii) will not result in any violation of any law, administrative regulation or administrative or court decree applicable to the Company or the Subsidiary except for such violations as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company's execution, delivery and performance of the Transaction Documents and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Common Shares and Warrants and reservation for issuance and issuance of the Warrant Shares), except (A) filings pursuant to Regulation D and applicable state securities or blue sky laws, which have been made or will be made in a timely manner (B) as have otherwise been obtained or made by the Company and are in full force and effect or (C) as may be required under the rules and regulations of the Financial Industry Regulatory Authority, Inc. ("FINRA"). As used herein, a "**Debt Repayment Triggering Event**" means any event or condition which gives, or with the giving of notice or lapse of time would give, the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or the Subsidiary.

(f) Acknowledgment Regarding Buyer's Purchase of Securities. The Company acknowledges and agrees that each Buyer is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that no Buyer is acting as a financial advisor or fiduciary of the Company or the Subsidiary (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by a Buyer or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Buyer's purchase of the Securities. The Company further represents to each Buyer that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

(g) No General Solicitation; Placement Agent's Fees. Neither the Company, nor the Subsidiary or affiliates thereof, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D under the 1933 Act) in connection with the offer or sale of the Securities. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or brokers' commissions (other than for persons engaged by any Buyer or its investment advisor) relating to or arising out of the transactions contemplated hereby. The Company acknowledges that it has engaged the Agent in connection with the sale of the Securities. Other than the Agent, neither the Company nor the Subsidiary has engaged any placement agent or other agent in connection with the sale of the Securities.

(h) No Integrated Offering. None of the Company, the Subsidiary, any of their affiliates, or any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of the issuance of any of the Securities under the 1933 Act, whether through integration with prior offerings or otherwise, or cause this offering of the Securities to require

approval of stockholders of the Company for purposes of any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated. None of the Company, the Subsidiary, their affiliates or any Person acting on their behalf will take any action or steps referred to in the preceding sentence that would require registration of the issuance of any of the Securities under the 1933 Act or cause the offering of the Securities to be integrated with other offerings for purposes of any such applicable stockholder approval provisions.

(i) Dilutive Effect. The Company understands and acknowledges that the number of Warrant Shares issuable upon exercise of the Warrants will increase in certain circumstances. The Company further acknowledges that its obligation to issue the Warrant Shares upon exercise of the Warrants in accordance with this Agreement and the Warrants is, in each case, absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other stockholders of the Company.

(j) Application of Takeover Protections: Rights Agreement. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Certificate of Incorporation (as defined in Section 3(p)) or the laws of the State of Delaware which is or could become applicable to any Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and any Buyer's ownership of the Securities. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any stockholder rights plan or similar arrangement relating to accumulations of beneficial ownership of Common Stock or a change in control of the Company.

(k) SEC Documents: Financial Statements. Since June 30, 2014, the Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "**1934 Act**") (all of the foregoing filed prior to the date of the Closing and all exhibits included therein and financial statements, notes and schedules thereto and documents incorporated by reference therein, together with the registration statement of the Company on Form S-1 filed with the Commission on June 30, 2014, being hereinafter referred to as the "**SEC Documents**"). The Company has delivered to the Buyers or their respective representatives true, correct and complete copies of the SEC Documents not available on the SEC's Electronic Data Gathering Analysis ("**EDGAR**") system. As of their respective filing dates, the SEC Documents complied in all material respects with the applicable requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. As of their respective filing dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with generally

accepted accounting principles, consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

(l) Absence of Certain Changes. Except as disclosed in the SEC Documents, since June 30, 2014: (i) there has occurred no event that would, to the Company's knowledge, reasonably be expected to result in a Material Adverse Effect; (ii) the Company and the Subsidiary, considered as one entity, have not incurred any material liability or obligation, indirect, direct or contingent, including without limitation any losses or interference with its business from fire, explosion, flood, earthquakes, accident or other calamity, whether or not covered by insurance, or from any strike, labor dispute or court or governmental action, order or decree, that are material, individually or in the aggregate, to the Company and the Subsidiary, considered as one entity, or has entered into any transactions not in the ordinary course of business; and (iii) there has not been any material decrease in the capital stock or any material increase in any short-term or long-term indebtedness of the Company or the Subsidiary and there has been no dividend or distribution of any kind declared, paid or made by the Company or, except for dividends paid to the Company, by the Company's subsidiary on any class of capital stock, or any repurchase or redemption by the Company or the Subsidiary of any class of capital stock.

(m) Conduct of Business; Regulatory Permits. Without limiting the generality of the foregoing, the Company is not in violation of any of the rules, regulations or requirements of the NASDAQ Global Market ("**Nasdaq**"), except for any such violation as would not be reasonably expected to result in a Material Adverse Effect. Since July 1, 2014, (i) the Common Stock has been designated for quotation or included for listing on Nasdaq, (ii) trading in the Common Stock has not been suspended by the SEC or Nasdaq and (iii) the Company has received no communication, written or oral, from the SEC or Nasdaq regarding the suspension or delisting of the Common Stock from the Nasdaq. The Company and the Subsidiary 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 ("**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 the Subsidiary 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.

(n) Foreign Corrupt Practices. Neither the Company nor the Subsidiary nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or the Subsidiary has, in the course of its actions for, or on behalf of, the Company or the Subsidiary (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 the Subsidiary 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.

(o) Transactions With Affiliates. Except as set forth in the SEC Documents filed at least ten (10) days prior to the date hereof or on Schedule 3(o) hereto, none of the officers, directors or employees of the Company or the Subsidiary is presently a party to any transaction with the Company or the Subsidiary (other than for ordinary course services as employees, officers or directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any such officer, director or employee or, to the knowledge of the Company or the Subsidiary, any corporation, partnership, trust or other entity in which any such officer, director, or employee has a substantial interest or is an officer, director, trustee or partner.

(p) Capitalization. As of the date hereof, the authorized capital stock of the Company consists of (x) 125,000,000 shares of Common Stock, of which as of the date hereof, 18,439,382 shares are issued and outstanding, 4,281,333 shares are reserved for issuance pursuant to the Company’s employee incentive plan and other options outstanding and 40,790 shares are reserved for issuance pursuant to securities (other than the Warrants) exercisable or exchangeable for, or convertible into, shares of Common Stock, and (y) 100,000,000 shares of preferred stock, of which as of the date hereof, none are issued and outstanding. All of such outstanding shares have been, or upon issuance will be, validly issued and are fully paid and nonassessable. Except as set forth above in this Section 3(p) or as disclosed in the SEC Documents: (i) none of the Company’s capital stock is subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company; (ii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or the Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or the Subsidiary is or may become bound to issue additional capital stock of the Company or the Subsidiary or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or the Subsidiary; (iii) there are no outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing material Indebtedness (as defined below) of the Company or the Subsidiary or by which the Company or the Subsidiary is or may become bound; (iv) other than as contemplated by the Credit Agreement, there are no financing statements securing obligations in any material amounts, either singly or in the aggregate, filed in connection with the Company or the Subsidiary; (v) there are no agreements or arrangements under which the Company or the Subsidiary is obligated to register the sale of any of their securities under the 1933 Act (except pursuant to the Registration Rights Agreement); (vi) there are no outstanding securities or instruments of the

Company or the Subsidiary which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or the Subsidiary is or may become bound to redeem a security of the Company or the Subsidiary; (vii) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities; (viii) the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement; and (ix) the Company and the Subsidiary have no liabilities or obligations required to be disclosed in the SEC Documents but not so disclosed in the SEC Documents, other than those incurred in the ordinary course of the Company's or the Subsidiary's respective businesses and which, individually or in the aggregate, do not or would not be reasonably expected have a Material Adverse Effect. The Company has furnished to the Buyers (including through EDGAR) true, correct and complete copies of the Company's Certificate of Incorporation, as amended and as in effect on the date hereof (the "**Certificate of Incorporation**"), and the Company's Bylaws, as amended and as in effect on the date hereof (the "**Bylaws**"), and the terms of all securities convertible into, or exercisable or exchangeable for, shares of Common Stock and the material rights of the holders thereof in respect thereto. For purposes of this Agreement: (x) "**Indebtedness**" of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services, including (without limitation) "capital leases" in accordance with generally accepted accounting principles (other than trade payables entered into in the ordinary course of business), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with generally accepted accounting principles, consistently applied for the periods covered thereby, is classified as a capital lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above; (y) "**Contingent Obligation**" means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto; and (z) "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(q) No Material Actions or Proceedings. There is no action, suit, proceeding, inquiry or investigation brought by or before any governmental entity now pending or, to the knowledge of the Company, threatened, against or affecting the Company or the Subsidiary, which would reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect or materially and adversely affect the consummation of the transactions contemplated by this Agreement or the performance by the Company of its obligations hereunder; and the aggregate of all pending legal or governmental proceedings to which the Company or the Subsidiary is a party or of which any of their respective properties or assets is the subject, including ordinary routine litigation incidental to the business, if determined adversely to the Company, would not reasonably be expected to have a Material Adverse Effect. No material labor dispute with the employees of the Company or the Subsidiary exists or, to the knowledge of the Company, is threatened or imminent. To the knowledge of the Company, no material labor dispute with the employees of any principal supplier, manufacturer, customer or contractor of the Company exists or is threatened or imminent.

(r) Insurance. Each of the Company and the Subsidiary are insured by recognized, financially sound and reputable institutions with policies in such amounts and with such deductibles and covering such risks as are generally deemed adequate and customary for their businesses including, but not limited to, policies covering real and personal property owned or leased by the Company and the Subsidiary against theft, damage, destruction, acts of vandalism and earthquakes and policies covering the Company and the Subsidiary for product liability claims and clinical trial liability claims. The Company has no reason to believe that it or the Subsidiary will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to have a Material Adverse Effect. Neither the Company nor the Subsidiary has been denied any insurance coverage which it has sought or for which it has applied.

(s) Employee Relations.

(i) Neither the Company nor the Subsidiary is a party to any collective bargaining agreement or employs any member of a union. The Company and the Subsidiary believe that their relations with their employees are good. No executive officer (as defined in Rule 501(f) of the 1933 Act) of the Company or the Subsidiary has notified the Company or the Subsidiary that such officer intends to leave the Company or the Subsidiary or otherwise terminate such officer's employment with the Company or the Subsidiary. No executive officer of the Company or the Subsidiary, is, or is now reasonably expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement, non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject the Company or the Subsidiary to any liability with respect to any of the foregoing matters.

(ii) The Company and the Subsidiary, to their knowledge, are in compliance with all federal, state, local and foreign laws and regulations respecting labor, employment and employment practices and benefits, terms and conditions of employment and wages and hours, except where failure to be in compliance would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(t) Title. The Company does not own any real property. Except as contemplated by the Credit Agreement, the Company and the Subsidiary have good and marketable title to all personal property and other assets reflected as owned in the financial statements referred to in Section 3(k) above, in each case free and clear of any security interests, mortgages, liens, encumbrances, equities, adverse claims and other defects. The real property, improvements, equipment and personal property held under lease by the Company or the Subsidiary are held under valid and enforceable leases, with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment or personal property by the Company or the Subsidiary.

(u) Intellectual Property Rights. The Company and the Subsidiary own, or have obtained valid and enforceable licenses for, the material inventions, patent applications, patents, trademarks, trade names, service names, copyrights, trade secrets and other intellectual property (collectively "**Intellectual Property**") that is disclosed in the SEC Documents ("**Company Intellectual Property**"). To the Company's knowledge: (i) there are no third parties who have rights to any Intellectual Property, except for customary reversionary rights of third-party licensors with respect to Company Intellectual Property that is disclosed SEC Documents as licensed to the Company or the Subsidiary, that is necessary to conduct the business as currently conducted or as currently proposed to be conducted in the future by the Company and the Subsidiary as described in the SEC Documents; and (ii), except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, there is no infringement by third parties of any Company Intellectual Property. Except as would not reasonably be 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, except for proceedings before the U.S. Patent and Trademark Office or a foreign government intellectual property office: (A) challenging the Company's rights in or to any Company Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any granted and enforceable Company Intellectual Property, and the Company is currently unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim that, if asserted on the date hereof, would reasonably be expected to succeed; or (C) asserting that the Company or the Subsidiary infringes or otherwise violates, or would, upon the commercialization of any product or service described in the SEC Documents as under development, infringe or violate, any patent, trademark, trade name, service name, copyright, trade secret or other proprietary rights of others, and the Company is currently unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim that, if asserted on the date hereof, would reasonably be expected to succeed. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company and the Subsidiary have complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or the Subsidiary, and all such agreements are in full force and effect. The product candidates described in the SEC Documents as under development by the Company or the Subsidiary fall within the scope of the claims of one or more patents or patent applications owned by, or exclusively licensed to, the Company or the Subsidiary.

(v) Clinical Data and Regulatory Compliance. The preclinical tests and clinical trials, and other studies (collectively, “studies”) that are described in, or the results of which are referred to in, the SEC Documents were and, if still pending, are being conducted in all material respects in accordance with the protocols, procedures and controls designed and approved for such studies and with standard medical and scientific research procedures; each description of the results of such studies is accurate and complete in all material respects and fairly presents the data derived from such studies, and the Company and the Subsidiary have no knowledge of any other studies the results of which are inconsistent with, or otherwise call into question, the results described or referred to in the SEC Documents; the Company and the Subsidiary have made all such filings and obtained all such approvals as may be required by the Food and Drug Administration of the U.S. Department of Health and Human Services or any committee thereof or from any other U.S. or foreign government or drug or medical device regulatory agency, or health care facility Institutional Review Board (collectively, the “**Regulatory Agencies**”) except where the failure to make such filing or obtain such approval would not reasonably be expected to, individually or in the aggregate, result in a Material Adverse Effect; neither the Company nor the Subsidiary has received any notice of, or correspondence from, any Regulatory Agency requiring the termination, suspension or material modification of any clinical trials that are described or referred to in the SEC Documents; and the Company and the Subsidiary have each operated and currently are in compliance in all material respects with all applicable rules, regulations and policies of the Regulatory Agencies.

(w) Environmental Laws. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect: (i) neither the Company nor the Subsidiary is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products (collectively, “**Hazardous Materials**”) or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, “**Environmental Laws**”); (ii) the Company and the Subsidiary have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements; (iii) there are no pending or, to the Company’s knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or the Subsidiary; and (iv) there are no events or circumstances existing as of the date hereof that might reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or governmental body or agency, against or affecting the Company or the Subsidiary relating to Hazardous Materials or any Environmental Laws.

(x) Subsidiary Rights. The Company has the unrestricted right to vote, and (subject to limitations imposed by applicable law) to receive dividends and distributions on, all capital securities of the Subsidiary.

(y) Tax Status. The Company and the Subsidiary have filed all necessary federal, state and foreign income and franchise tax returns or have properly requested extensions thereof and have paid all taxes shown on such returns as required to be paid by any of them and, if due and payable, any related or similar assessment, fine or penalty levied against any of them except as may be being contested in good faith and by appropriate proceedings. The Company has made adequate charges, accruals and reserves in the applicable financial statements referred to in Section 3(k) above in respect of all federal, state and foreign income and franchise taxes for all periods as to which the tax liability of the Company or the Subsidiary has not been finally determined, except to the extent of any inadequacy that would not reasonably be expected to result in a Material Adverse Effect.

(z) Company's Accounting System. The Company and the Subsidiary make and keep accurate books and records and maintain a system of internal accounting controls designed to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles as applied in the United States and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(aa) Disclosure Controls and Procedures. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-15 and 15d-15 under the Exchange Act), which 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.

(bb) Off Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company and an unconsolidated or other off balance sheet entity that is required to be disclosed by the Company in the SEC Documents and is not so disclosed or that otherwise would be reasonably likely to have a Material Adverse Effect.

(cc) Investment Company Status. The Company is not, and upon consummation of the sale of the Securities will not be, an "investment company," a company controlled by an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for, an "investment company" as such terms are defined in the Investment Company Act of 1940, as amended.

(dd) Transfer Taxes. On the Closing Date, all stock transfer or other taxes (other than income or similar taxes) which are required to be paid in connection with the sale and transfer of the Securities to be sold to each Buyer 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 complied with.

(ee) Manipulation of Price. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) other than the Agent, sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) other than the Agent, paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.

(ff) Disclosure. The Company understands and confirms that each of the Buyers will rely on the foregoing representations in effecting transactions in securities of the Company. All disclosure provided to the Buyers regarding the Company or the Subsidiary, their business and the transactions contemplated hereby, including the Schedules to this Agreement, furnished by or on behalf of the Company is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. No event or circumstance has occurred or information exists with respect to the Company or the Subsidiary or its or their business, properties, prospects, operations or financial conditions, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed.

(gg) Acknowledgement Regarding Buyers' Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding, but subject to compliance by the Buyers with applicable law, it is understood and acknowledged by the Company (i) that past or future open market or other transactions by any Buyer, including, without limitation, short sales or "derivative" transactions, before or after the closing of this or future private placement transactions, may negatively impact the market price of the Company's publicly-traded securities; (ii) subject to the provisions of Section 2(j), that any Buyer, and counter parties in "derivative" transactions to which any such Buyer is a party, directly or indirectly, presently may have a "short" position in the Common Stock, and (iii) that each Buyer shall not be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction. The Company further understands and acknowledges that, subject to compliance by the Buyers with applicable law, (a) one or more Buyers may engage in hedging and/or trading activities at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value of the Warrant Shares deliverable with respect to Securities are being determined and (b) such hedging and/or trading activities (if any) could reduce the value of the existing stockholders' equity interests in the Company at and after the time that the hedging and/or trading activities are being conducted.

(hh) U.S. Real Property Holding Corporation. The Company is not, nor has it ever been, a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon any Buyer's request.

(ii) No "Bad Actor" Disqualification. No "bad actor" disqualifying event described in Rule 506(d)(1)(i)-(viii) of the 1933 Act (a "**Disqualification Event**") is applicable to the Company or, to the Company's knowledge, any Company Covered Person (as defined below), except for a Disqualification Event as to which Rule 506(d)(2)(ii-iv) or (d)(3), is applicable. "**Company Covered Person**" means, with respect to the Company as an "issuer" for purposes of Rule 506 promulgated under the 1933 Act, any Person listed in the first paragraph of Rule 506(d)(1).

4. COVENANTS.

(a) Best Efforts. Each party shall use its best efforts to timely satisfy each of the covenants and conditions to be satisfied by it as provided in Sections 6 and 7 of this Agreement.

(b) Form D and Blue Sky. The Company agrees to file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof to each Buyer promptly after such filing. The Company, on or before the Closing Date, shall take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for or to qualify the Securities for sale to the Buyers at the Closing pursuant to this Agreement under applicable securities or "Blue Sky" laws of the states of the United States (or to obtain an exemption from such qualification), and shall provide evidence of any such action so taken to the Buyers on or prior to the Closing Date. The Company shall make all filings and reports relating to the offer and sale of the Securities required under applicable securities or "Blue Sky" laws of the states of the United States following the Closing Date.

(c) Reporting Status. During the Registration Period (as defined in the Registration Rights Agreement), the Company shall timely file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status as an issuer required to file reports under the 1934 Act even if the 1934 Act or the rules and regulations thereunder would otherwise permit such termination.

(d) Use of Proceeds. The Company will use the proceeds from the sale of the Securities for advancement of its pre-clinical and clinical programs, research and development and general corporate purposes, and not for (A) the repayment of any outstanding Indebtedness of the Company or the Subsidiary or (B) redemption or repurchase of its or the Subsidiary's equity securities.

(e) Financial Information. The Company agrees to send the following to each Investor (as defined in the Registration Rights Agreement) during the Registration Period (i) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC, a copy of its Annual Reports in Form 10-K and Quarterly Reports on Form, 10-Q, any interim reports or any consolidated balance sheets, income statements, stockholders' equity statements and/or cash flow statements for any period other than annual, any Current Reports on Form 8-K and any registration statements (other than on Form S-8) or amendments filed pursuant to the 1933 Act, and (ii) copies of any notices and other information made available or given to the stockholders of the Company generally, contemporaneously with the making available or giving thereof to the stockholders. As used herein, "**Business Day**" means any day other than Saturday, Sunday, Federal holiday or other day on which the SEC's Washington, DC office or commercial banks in The City of New York are authorized or required by law to remain closed to the public.

(f) Listing. The Company shall promptly secure and maintain the listing of all of the Registrable Securities (as defined in the Registration Rights Agreement) pursuant to the terms set forth in the Registration Rights Agreement. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 4(f).

(g) Fees. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or broker's commissions (other than for Persons engaged by any Buyer) relating to or arising out of the transactions contemplated hereby, including, without limitation, any fees or commissions payable to the Agent. Except as otherwise set forth in the Transaction Documents, each party to this Agreement shall bear its own expenses in connection with the transactions contemplated hereby.

(h) Pledge of Securities. The Company acknowledges and agrees that the Securities may be pledged by an Investor (as defined in the Registration Rights Agreement) in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Securities. The pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Investor effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document, including, without limitation, Section 2(f) of this Agreement; provided that an Investor and its pledgee shall be required to comply with the provisions of Section 2(f) of this Agreement in order to effect a sale, transfer or assignment of Securities to such pledgee. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Securities may reasonably request in connection with a pledge of the Securities to such pledgee by an Investor.

(i) Disclosure of Transactions and Other Material Information. On or before 8:30 a.m., New York City time, on the second Business Day following the date of this Agreement, the Company shall issue a press release and file a Current Report on Form 8-K describing the terms of the transactions contemplated by the Transaction Documents in the form required by the 1934 Act (including all attachments, the "**8-K Filing**"). From and after the filing of the 8-K Filing with the SEC, no Buyer shall be in possession of any material, nonpublic information received from the Company, the Subsidiary or any of their respective officers, directors, employees or agents, which is not disclosed in the 8-K Filing. The Company shall not, and shall cause the Subsidiary and its and each of their respective officers, directors, employees and agents, not to, provide any Buyer with any material, nonpublic information regarding the Company or the Subsidiary from and after the filing of the 8-K Filing with the SEC without the express written consent of such Buyer. If a Buyer has, or believes it has, received any such material, nonpublic information regarding the Company or the Subsidiary after the occurrence of the 8-K Filing, it shall provide the Company with written notice thereof. The Company shall, within five (5) Trading Days of receipt of such notice, make public disclosure of such material, nonpublic information, to the extent such information is both material and nonpublic. "**Trading Day**" means any day on which the Common Stock is traded on Nasdaq, or, if Nasdaq is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded; provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00 p.m., New York time). Neither the Company, the Subsidiary nor any Buyer shall issue any press releases or any other public statements with respect to the transactions contemplated hereby; provided, however, that the Company shall be entitled, without the prior approval of any Buyer, to make any press release or other public disclosure with respect to such

transactions (i) in substantial conformity with the 8-K Filing and contemporaneously therewith and (ii) as is required by applicable law and regulations (provided that in the case of clause (i) the Agent shall be consulted by the Company in connection with any such press release or other public disclosure prior to its release). Without the prior written consent of any applicable Buyer, neither the Company nor the Subsidiary or affiliates shall disclose the name of such Buyer in any filing, announcement, release or otherwise other than in connection with the Registration Statement, as contemplated pursuant to the Registration Rights Agreement, unless such disclosure is required by law, regulation or Nasdaq.

(j) Reservation of Shares. The Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, no less than 100% of the number of shares of Common Stock issuable upon exercise of the Warrants issued at the Closing.

(k) Conduct of Business. The business of the Company and the Subsidiary shall not be conducted in violation of any law, ordinance or regulation of any governmental entity, except where such violations would not result, either individually or in the aggregate, in a Material Adverse Effect.

5. REGISTER; TRANSFER AGENT INSTRUCTIONS.

(a) Register. The Company shall maintain at its principal executive offices (or such other office or agency of the Company as it may designate by notice to each holder of Securities), a register for the Warrants in which the Company shall record the name and address of the Person in whose name the Warrants have been issued (including the name and address of each transferee) and the number of Warrant Shares issuable upon exercise of the Warrants held by such Person. The Company shall keep the register open and available at all times during business hours for inspection, upon reasonable notice, of any Buyer or its legal representatives.

(b) Transfer Agent Instructions. The Company shall issue irrevocable instructions to its transfer agent, and any subsequent transfer agent, to issue certificates or credit shares to the applicable balance accounts at The Depository Trust Company (“**DTC**”), registered in the name of each Buyer or its respective nominee(s), for the Warrant Shares in such amounts as specified from time to time by each Buyer to the Company upon exercise of the Warrants (the “**Irrevocable Transfer Agent Instructions**”). The Company represents and warrants that no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5, and stop transfer instructions to give effect to Section 2(f) hereof, will be given by the Company to its transfer agent with respect to the Securities, and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the other Transaction Documents. If a Buyer effects a sale, assignment or transfer of the Securities in accordance with Section 2(f), the Company shall permit the transfer and shall promptly instruct its transfer agent to issue one or more certificates or credit shares to the applicable balance accounts at DTC in such name and in such denominations as specified by such Buyer to effect such sale, transfer or assignment. In the event that such sale, assignment or transfer involves Warrant Shares sold, assigned or transferred pursuant to an effective registration statement or pursuant to Rule 144, the transfer agent shall issue such Securities to the Buyer, assignee or transferee, as the case may be, without any restrictive legend.

(c) **Breach.** The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to a Buyer. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 5 may be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 5, that a Buyer shall be entitled, in addition to all other available remedies, to seek an order and/or injunction restraining any breach and requiring immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required.

(d) **Additional Relief.** If the Company shall fail for any reason or for no reason to issue to such holder unlegended certificates within three (3) Business Days of (x) receipt of documents necessary for the removal of legend set forth above or (y) the date of its obligation to deliver the shares of Common Stock as contemplated pursuant to clause (ii) below (the “**Deadline Date**”), then, in addition to all other remedies available to the holder, if on or after the Trading Day immediately following such three Business Day period, the holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the holder of shares of Common Stock that the holder anticipated receiving from the Company (a “**Buy-In**”), then the Company shall, within three Business Days after the holder’s request and in the holder’s discretion, either (i) pay cash to the holder in an amount equal to the holder’s total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the “**Buy-In Price**”), at which point the Company’s obligation to deliver such certificate (and to issue such shares of Common Stock) shall terminate, or (ii) promptly honor its obligation to deliver to the holder a certificate or certificates representing such shares of Common Stock and pay cash to the holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the Deadline Date. “**Closing Bid Price**” means, for any security as of any date, the last closing price for such security on Nasdaq, as reported by Bloomberg, or, if Nasdaq begins to operate on an extended hours basis and does not designate the closing bid price then the last bid price of such security prior to 4:00:00 p.m., New York Time, as reported by Bloomberg, or, if Nasdaq is not the principal securities exchange or trading market for such security, the last closing price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price is reported for such security by Bloomberg, the average of the bid prices of any market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Bid Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price of such security on such date shall be the fair market value as mutually determined by the Company and the holder. If the Company and the holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 of the Warrants. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

6. CONDITIONS TO THE COMPANY'S OBLIGATION TO SELL.

The obligation of the Company hereunder to issue and sell the Common Shares and the related Warrants to each Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion by providing each Buyer with prior written notice thereof:

(i) Such Buyer shall have executed and delivered to the Company (a) each of the Transaction Documents to which it is a party and (b) the Investor Questionnaire.

(ii) Such Buyer shall have delivered to the Company the Purchase Price for the Common Shares and the related Warrants being purchased by such Buyer at the Closing by wire transfer of immediately available funds pursuant to the wire instructions provided by the Company, and each other Buyer shall have delivered to the Company the Purchase Price for such other Buyer's Common Shares and related Warrants.

(iii) The representations and warranties of such Buyer shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date hereof and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such specified date), and such Buyer shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by such Buyer at or prior to the Closing Date. By delivering the Purchase Price for the Common Shares and the related Warrants being purchased by such Buyer at the Closing, such Buyer shall be deemed to have confirmed the foregoing as of the Closing Date.

(iv) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Common Shares and the Warrants.

7. CONDITIONS TO EACH BUYER'S OBLIGATION TO PURCHASE.

The obligation of each Buyer hereunder to purchase the Common Shares and the related Warrants at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for each Buyer's sole benefit and may be waived by such Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

(i) The Company shall have duly executed and delivered to such Buyer (i) each of the Transaction Documents and (ii) the Common Shares (in such amounts as such Buyer shall request) and the related Warrants (in such amounts as such Buyer shall request) being purchased by such Buyer at the Closing pursuant to this Agreement.

(ii) Such Buyer shall have received the opinion of Cooley LLP, counsel for the Company ("**Company Counsel**"), dated as of the Closing Date, in substantially the form of Exhibit E attached hereto.

(iii) The Company shall have delivered to such Buyer a copy of the Irrevocable Transfer Agent Instructions which instructions shall have been delivered to and acknowledged in writing by the Company's transfer agent.

(iv) The Common Stock (i) shall be listed on Nasdaq and (ii) shall not have been suspended, as of the Closing Date, by the SEC or Nasdaq from trading on Nasdaq nor shall suspension by the SEC or Nasdaq have been threatened, as of the Closing Date, either (A) in writing by the SEC or Nasdaq or (B) by falling below the minimum listing maintenance requirements of Nasdaq.

(v) The Company shall have delivered to such Buyer a certificate, executed by the Secretary of the Company and dated as of the Closing Date, as to (i) the resolutions consistent with Section 3(c) as adopted by the Company's board of directors in a form reasonably acceptable to such Buyer, (ii) the Certificate of Incorporation and (iii) the Bylaws, each as in effect at the Closing.

(vi) The representations and warranties of the Company shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date hereof and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such specified date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Closing Date. Such Buyer shall have received a certificate, executed by the Chief Executive Officer of the Company, dated as of the Closing Date, to the foregoing effect and as to such other matters as may be reasonably requested by such Buyer.

(vii) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Common Shares and the Warrants.

8. TERMINATION. In the event that the Closing shall not have occurred with respect to a Buyer on or before ten (10) Business Days from the date hereof due to the Company's or such Buyer's failure to satisfy the conditions set forth in Sections 6 and 7 above (and the nonbreaching party's failure to waive such unsatisfied condition(s)), the nonbreaching party shall have the option to terminate this Agreement with respect to such breaching party at the close of business on such date without liability of any party to any other party.

9. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. 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 herewith or with any transaction contemplated hereby or discussed herein, 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 to such party at the address for such 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. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile signature.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(e) Entire Agreement; Amendments. This Agreement and the other Transaction Documents supersede all other prior oral or written agreements between the Buyers, the Company, their affiliates and Persons acting on their behalf with respect to the matters discussed herein, and this Agreement, the other Transaction Documents and the instruments referenced herein and therein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor any Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the holders of Common Shares representing at least a majority of the amount of the Common Shares, or, if prior to the Closing Date, the Buyers listed on the Schedule of Buyers as being obligated to purchase at least a majority of the amount of the Common Shares. No provision hereof may be waived other than by an instrument in writing signed by the party against whom enforcement is sought. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Common Shares then outstanding. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration also is offered to all of the parties to the Transaction Documents, holders of

Common Shares or holders of the Warrants, as the case may be. The Company has not, directly or indirectly, made any agreements with any Buyers relating to the terms or conditions of the transactions contemplated by the Transaction Documents except as set forth in the Transaction Documents. Without limiting the foregoing, the Company confirms that, except as set forth in this Agreement, no Buyer has made any commitment or promise or has any other obligation to provide any financing to the Company or otherwise.

(f) Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by electronic mail (provided confirmation of transmission is electronically generated and kept on file by the sending party); or (iii) one Business Day after deposit with an overnight courier service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

Minerva Neurosciences, Inc.
1601 Trapelo Road
Suite 284
Waltham, MA 02451
E-mail: mlevine@minervaneurosciences.com
Attention: Mark Levine

with a copy (for informational purposes only) to:

Cooley LLP
500 Boylston Street
14th Floor
Boston, MA 02116
Facsimile: mreht@cooley.com
Attention: Marc Recht

If to the Transfer Agent:

Computershare Trust Company, N.A.
250 Royal Street
Canton, MA 02021
E-mail: Monique.Hughes@computershare.com
Attention: Monique Hughes

If to a Buyer, to its physical and electronic mail address set forth on the Schedule of Buyers, with copies to such Buyer's representatives as set forth on the Schedule of Buyers.

With a copy (for informational purposes only) to:

Jefferies LLC
520 Madison Avenue
New York, New York 10022
Attention: General Counsel

or to such other physical and/or electronic address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) electronically generated by the sender's electronic mail containing the time, date, recipient electronic mail address of such transmission or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by electronic mail or receipt from an overnight courier service in accordance with clause (i), (ii) or (iii) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted successors and assigns, including any purchasers of the Common Shares or the Warrants.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except that the Agent may rely upon the representations and warranties contained in this Agreement.

(i) Reliance By the Agent. The parties agree and acknowledge that the Agent may rely on the representations, warranties, agreements and covenants of the Company contained in this Agreement and may rely on the representations and warranties of the respective Buyers contained in this Agreement as if such representations, warranties, agreements, and covenants, as applicable, were made directly to the Agent. The parties further agree that the Agent may rely on any questionnaires or representations delivered by the Company, the directors and officers of the Company, any stockholders of the Company or the Buyers, for purposes of ensuring compliance with Rule 506 under the 1933 Act. The parties further agree that the Agent may rely on or, if the Agent so requests, be specifically named as an addressee of, the legal opinions to be delivered pursuant to this Agreement.

(j) Exculpation of Agent. Each party hereto agrees for the express benefit of the Agent, its affiliates and representatives that:

(i) Neither Jefferies LLC (as Agent) nor any of its affiliates or any of its representatives (1) has any duties or obligations other than those specifically set forth herein or in the Engagement Letter; (2) shall be liable for any improper payment made in accordance with the information provided by the Company; (3) makes any representation or warranty, or has any responsibilities as to the validity, accuracy, value or genuineness of any information, certificates or documentation delivered by or on behalf of the Company pursuant to this Agreement or the Transaction Documents or in connection with any of the transactions contemplated hereby or thereby; or (4) shall be liable (x) for any action taken, suffered or omitted by any of them in good faith and reasonably believed to be authorized or within the discretion or rights or powers conferred upon it by this Agreement or any Transaction Document or (y) for anything which any of them may do or refrain from doing in connection with this Agreement or any Transaction Document, except for such party's own gross negligence, willful misconduct or bad faith.

(ii) The Agent, its affiliates and representatives shall be entitled to (1) rely on, and shall be protected in acting upon, any certificate, instrument, opinion, notice, letter or any other document or security delivered to any of them by or on behalf of the Company, and (2) be indemnified by the Company for acting as Agent hereunder pursuant the indemnification provisions set forth in the Engagement Letter.

(k) Survival. Unless this Agreement is terminated under Section 8, the representations and warranties of the Company and the Buyers contained in Sections 2 and 3, and the agreements and covenants set forth in Sections 4, 5 and 9 shall survive the Closing. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

(l) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(m) Indemnification. In consideration of each Buyer's execution and delivery of the Transaction Documents and acquiring the Securities thereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless each Buyer and each other holder of the Securities and all of their stockholders, partners, members, officers, directors, employees and direct or indirect investors (collectively, the "**Indemnitees**") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "**Indemnified Liabilities**"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby or (c) any cause of action, suit or claim brought or made against such Indemnitee by a third party (including for these purposes a derivative action brought on behalf of the Company) and arising out of or resulting from (i) the execution, delivery, performance or enforcement of the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, or (iii) the status of such Buyer or holder of the Securities as an investor in the Company, except, in each case, with respect to any Indemnified Liabilities that resulted from any Indemnitee's gross negligence, willful misconduct or fraud. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law. Except as otherwise set forth herein, the mechanics and procedures with respect to the rights and obligations under this Section 9(m) shall be the same as those set forth in Section 6 of the Registration Rights Agreement.

(n) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(o) Remedies. Each Buyer and each holder of the Securities shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which such holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law. Furthermore, the Company recognizes that in the event that it fails to perform, observe, or discharge any or all of its obligations under the Transaction Documents, any remedy at law may prove to be inadequate relief to the Buyers. The Company therefore agrees that the Buyers shall be entitled to seek temporary and permanent injunctive relief in any such case without the necessity of proving actual damages and without posting a bond or other security.

(p) Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) the Transaction Documents, whenever any Buyer exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Buyer may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights

(q) Independent Nature of Buyers' Obligations and Rights. The obligations of each Buyer under any Transaction Document are several and not joint with the obligations of any other Buyer, and no Buyer shall be responsible in any way for the performance of the obligations of any other Buyer under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Buyer pursuant hereto or thereto, shall be deemed to constitute the Buyers as, and the Company acknowledges that the Buyers do not so constitute, a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Buyers are in any way acting in concert or as a group, and the Company will not assert any such claim with respect to such obligations or the transactions contemplated by the Transaction Documents and the Company acknowledges that the Buyers are not acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. The Company acknowledges and each Buyer confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Buyer shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Buyer to be joined as an additional party in any proceeding for such purpose.

[Signature Page Follows]

IN WITNESS WHEREOF, each Buyer and the Company have caused its respective signature page to this Securities Purchase Agreement to be duly executed as of the date first written above.

COMPANY:

MINERVA NEUROSCIENCES, INC.

By: /s/ Remy Luthringer

Name: Remy Luthringer

Title: President & CEO

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Securities Purchase Agreement to be duly executed as of the date first written above.

BUYERS:

[BUYER]

By: _____
Name:
Title:

[EXECUTED SIGNATURE PAGES OF BUYERS INTENTIONALLY OMITTED]

[FORM OF WARRANT]

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS INSTRUMENT NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

MINERVA NEUROSCIENCES, INC.
WARRANT TO PURCHASE COMMON STOCK

Warrant No.: _____

Number of Shares of Common Stock: _____

Date of Issuance: March [X], 2015 (“**Issuance Date**”)

Minerva Neurosciences, Inc., a corporation organized under the laws of Delaware (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [BUYER], the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon surrender of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”), at any time or times on or after the date hereof, but not after 11:59 p.m., New York time, on the Expiration Date (as defined below), [X] fully paid nonassessable shares of Common Stock (as defined below) (the “**Warrant Shares**”). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in the Securities Purchase Agreement. This Warrant is one of the Warrants to purchase Common Stock (the “**SPA Warrants**”) issued pursuant to that certain Securities Purchase Agreement, dated as of March 13, 2015 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein (the “**Securities Purchase Agreement**”).

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof, this Warrant may be exercised by the Holder on any day on or after the date hereof but not after 11:59 p.m., New York time, on the Expiration Date, in whole or in part, by (i) delivery of a written notice, in the form attached hereto as Exhibit A (an “**Exercise Notice**”), of the Holder’s election to exercise this Warrant and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the “**Aggregate Exercise Price**”) in cash or by wire transfer of immediately available funds. The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. On or before the second (2nd) Business Day following the date on which the Company has received each of the Exercise Notice and the Aggregate Exercise Price (together, the “**Exercise Delivery Documents**”), the Company shall transmit by electronic mail an acknowledgment of confirmation of receipt of the Exercise Delivery Documents to the Holder and the Company’s transfer agent (the “**Transfer Agent**”). On or before the third (3rd) Business Day following the date on which the Company has received all of the Exercise Delivery Documents (the “**Share Delivery Date**”), the Company shall (X) if the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program, upon the request of the Holder, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit Withdrawal Agent Commission system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. Upon delivery of the Exercise Delivery Documents, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Business Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which are acquired upon such exercise. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded down to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant.

(b) Exercise Price. For purposes of this Warrant, “**Exercise Price**” means \$5.772, subject to adjustment as provided herein.

(c) Company’s Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder within three (3) Business Days following receipt of the Exercise Delivery Documents, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company’s share register or to credit the Holder’s balance account with DTC for such number of

shares of Common Stock to which the Holder is entitled upon the Holder's exercise of this Warrant or if the Company fails to deliver to the Holder a certificate or certificates representing the applicable Warrant Shares within three (3) Trading Days after its obligation to do so under clause (ii) below, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise or receipt that the Holder anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Business Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Warrant Shares and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise.

(d) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(e) Insufficient Authorized Shares. If at any time while any of the SPA Warrants remain outstanding the Company does not have a sufficient number of authorized and otherwise unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of the SPA Warrants at least a number of shares of Common Stock equal to 100% (the "**Required Reserve Amount**") of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of all of the SPA Warrants then outstanding (an "**Authorized Share Failure**"), then the Company shall immediately take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the SPA Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than one hundred and twenty (120) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal.

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of

Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 2 shall become effective at the close of business on the date such subdivision or combination becomes effective.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “**Distribution**”), at any time after the issuance of this Warrant, then, in each such case:

(a) any Exercise Price in effect immediately prior to the close of business on the record date fixed for the determination of holders of shares of Common Stock entitled to receive the Distribution shall be reduced, effective as of the close of business on such record date, to a price determined by multiplying such Exercise Price by a fraction of which (i) the numerator shall be the Closing Bid Price of the shares of Common Stock on the Trading Day immediately preceding such record date minus the value of the Distribution (as determined in good faith by the Company’s Board of Directors) applicable to one share of Common Stock, and (ii) the denominator shall be the Closing Bid Price of the shares of Common Stock on the Trading Day immediately preceding such record date; and

(b) the number of Warrant Shares shall be increased to a number of shares equal to the number of shares of Common Stock obtainable immediately prior to the close of business on the record date fixed for the determination of holders of shares of Common Stock entitled to receive the Distribution multiplied by the reciprocal of the fraction set forth in the immediately preceding paragraph (a); provided that, in the event that the Distribution is of shares of common stock of a company whose common stock is traded on a national securities exchange or a national automated quotation system (“**Other Shares of Common Stock**”), then the Holder may elect to receive a warrant to purchase Other Shares of Common Stock in lieu of an increase in the number of Warrant Shares, the terms of which shall be identical to those of this Warrant, except that such warrant shall be exercisable into the number of shares of Other Shares of Common Stock that would have been payable to the Holder pursuant to the Distribution had the Holder exercised this Warrant immediately prior to such record date and with an aggregate exercise price equal to the product of the amount by which the exercise price of this Warrant was decreased with respect to the Distribution pursuant to the terms of the immediately preceding paragraph (a) and the number of Warrant Shares calculated in accordance with the first part of this paragraph (b).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the “**Purchase Rights**”), then the Holder will

be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(b) Fundamental Transactions. The Company shall not enter into or be party to a Fundamental Transaction unless (A) (i) the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the Registration Rights Agreement in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance reasonably satisfactory to the Required Holders and approved by the Required Holders prior to the consummation of such Fundamental Transaction, including agreements to deliver to each holder of SPA Warrants in exchange for such SPA Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the shares of Common Stock reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and reasonably satisfactory to the Required Holders and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market or (B) provides each Holder with not less than ten (10) Business Days prior notice of the anticipated consummation of such Fundamental Transaction (which notice may be provided by means of a press release and/or the filing of a Current Report on Form 8-K) and affords each Holder an opportunity to exercise such Holder's Warrants prior to the consummation of such Fundamental Transaction, following which each unexercised Warrant will be null, void and of no further force or effect. Upon the occurrence of any Fundamental Transaction subject to the provisions of Section 4(b)(A), the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of the Fundamental Transaction subject to the provisions of Section 4(b)(A), the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the consummation of the Fundamental Transaction, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property) issuable upon the exercise of the Warrant prior to such Fundamental Transaction, such shares of the publicly traded common stock (or its equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Warrant been converted immediately prior to such Fundamental Transaction, as adjusted in accordance with the provisions of this Warrant. The provisions of this Section 4(b) shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the exercise of this Warrant.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this Warrant and take all commercially reasonable action as may be required to protect the rights of the Holder hereunder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any of the SPA Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the SPA Warrants, 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the SPA Warrants then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A STOCKHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a Holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders; provided, that the Company shall be deemed to have complied with such requirement by filing any such notices or other information on the Securities and Exchange Commission's Electronic Data Gathering Analysis system.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, subject to any restrictions on such transfer set forth in Section 14, or under the Securities Purchase Agreement, Registration Rights Agreement or any other agreement to which the Holder is party or by which it is bound, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no Warrants for fractional shares of Common Stock shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 8(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Required Holders; provided that no such action may increase the exercise price of any SPA Warrant or decrease the number of shares or class of stock obtainable upon exercise of any SPA Warrant without the written consent of the Holder. No such amendment shall be effective to the extent that it applies to less than all of the holders of the SPA Warrants then outstanding.

10. GOVERNING LAW. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents (as defined in the Securities Purchase Agreement), at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder may cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to seek an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

14. **TRANSFER.** This Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, except as may otherwise be required by Section 2(g) of the Securities Purchase Agreement or as otherwise set forth herein or therein.

15. **CERTAIN DEFINITIONS.** For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**Bloomberg**” means Bloomberg Financial Markets.

(b) “**Business Day**” means any day other than Saturday, Sunday, Federal holiday or other day on which the SEC’s Washington, DC office or commercial banks in The City of New York are authorized or required by law to remain closed to the public.

(c) “**Closing Bid Price**” and “**Closing Sale Price**” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the NASDAQ Global Market, as reported by Bloomberg, or, if the NASDAQ Global Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or last trade price, respectively, of such security prior to 4:00 p.m., New York time, as reported by Bloomberg, or, if the NASDAQ Global Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(d) “**Common Stock**” means (i) the Company’s shares of Common Stock, par value \$0.0001 per share, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(e) “**Convertible Securities**” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

(f) “**Dollar**”, “**US Dollar**” and “**\$**” each mean the lawful money of the United States.

(g) “**Eligible Market**” means The New York Stock Exchange, Inc., The NASDAQ Capital Market, The NASDAQ Global Market or The NASDAQ Global Select Market.

(h) “**Expiration Date**” means the date that is two years from the Closing Date or, if such date falls on a day other than a Business Day or on which trading does not take place on the NASDAQ Global Market (a “**Holiday**”), the next date that is not a Holiday.

(i) “**Fundamental Transaction**” means that the Company shall, directly or indirectly, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Person, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company to another Person, or (iii) allow another Person to make a purchase, tender or exchange offer that is accepted by the holders of more than the 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer), or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock purchase agreement or other business combination), or (v) reorganize, recapitalize or reclassify its Common Stock, or (vi) any “person” or “group” (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act) is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock.

(j) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(k) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

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

(m) “**Registration Rights Agreement**” means that certain registration rights agreement by and among the Company and the Buyers.

(n) “**Required Holders**” means the holders of the SPA Warrants representing at least a majority of shares of Common Stock underlying the SPA Warrants then outstanding.

(o) “**Successor Entity**” means the Person (or, if so elected by the Required Holders, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Required Holders, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(p) “**Trading Day**” means any day on which the Common Stock is traded on the NASDAQ Global Market, or, if the NASDAQ Global Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded; provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00 p.m., New York time).

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

MINERVA NEUROSCIENCES, INC.

By: _____
Name:
Title:

EXERCISE NOTICE

**TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK**

The undersigned holder hereby exercises the right to purchase _____ of the shares of Common Stock (“**Warrant Shares**”) of Minerva Neurosciences, Inc., a corporation organized under the laws of Delaware (the “**Company**”), evidenced by the attached Warrant to Purchase Common Stock (the “**Warrant**”). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as _____ a “Cash Exercise” with respect to _____ Warrant Shares.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$_____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder _____ Warrant Shares in accordance with the terms of the Warrant.

Date: _____, _____

Name of Registered Holder

By: _____

Name:

Title:

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs _____ to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated March [✕], 2015 from the Company and acknowledged and agreed to by _____ .

MINERVA NEUROSCIENCES, INC.

By: _____
Name:
Title:

REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT (this “**Agreement**”), dated as of March 13, 2015, by and among Minerva Neurosciences, Inc., a Delaware corporation, with its principal offices at 1601 Trapelo Road, Suite 284, Waltham, MA 02451 (the “**Company**”), and the undersigned buyers (each, a “**Buyer**”, and collectively, the “**Buyers**”).

WHEREAS:

A. In connection with the Securities Purchase Agreement by and among the parties hereto of even date herewith (the “**Securities Purchase Agreement**”), the Company has agreed, upon the terms and subject to the conditions of the Securities Purchase Agreement, to issue and sell to each Buyer on the Closing Date (i) shares (the “**Common Shares**”) of the Company’s common stock, par value \$0.0001 per share (the “**Common Stock**”), and (ii) warrants (the “**Warrants**”), which will be exercisable to purchase shares of Common Stock (as exercised collectively, the “**Warrant Shares**”).

B. To induce the Buyers to execute and deliver the Securities Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the “**1933 Act**”), and applicable state securities laws.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each of the Buyers hereby agree as follows:

1. Definitions.

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Securities Purchase Agreement. As used in this Agreement, the following terms shall have the following meanings:

a. “**Business Day**” means any day other than Saturday, Sunday, Federal holiday or any other day on which the SEC’s Washington, DC office or commercial banks in the City of New York are authorized or required by law to remain closed the public.

b. “**Closing Date**” shall have the meaning set forth in the Securities Purchase Agreement.

c. “**Effective Date**” means the date the Registration Statement has been declared effective by the SEC.

d. “**Effectiveness Deadline**” means (i) in the event that the Registration Statement is not subject to review by the Staff, the earlier of (x) 105 days after the Closing Date, and (y) five Trading Days following the date on which the Staff notifies the Company that the Registration Statement is not subject to review, and (ii) in the event that the Registration Statement is subject to review by the Staff, the earlier of (x) 145 days after the Closing Date, and (y) five Trading Days following the date on which the Staff notifies the Company that it has no further comments on the Registration Statement.

e. “**Filing Deadline**” means the date that is 45 days after the Closing Date.

f. “**Investor**” means a Buyer or any transferee or assignee thereof to whom a Buyer assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 and any transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 for so long as any of the foregoing continues to hold Registrable Securities.

g. “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

h. “**register**”, “**registered**” and “**registration**” refer to a registration effected by preparing and filing one or more Registration Statements (as defined below) in compliance with the 1933 Act and pursuant to Rule 415 and the declaration or ordering of effectiveness of such Registration Statement(s) by the SEC.

i. “**Registrable Securities**” means (i) the Common Shares, (ii) the Warrant Shares issued or issuable upon exercise of the Warrants and (iii) any shares of capital stock issued or issuable with respect to the Common Shares, the Warrant Shares or the Warrants as a result of any stock split, stock dividend, recapitalization, exchange or similar event, without regard to any limitations on exercise of the Warrants.

j. “**Registration Statement**” means a registration statement or registration statements of the Company filed under the 1933 Act covering the Registrable Securities to include the Registrable Securities on such Registration Statement.

k. “**Required Holders**” means the holders of at least a majority of the Registrable Securities.

l. “**Required Registration Amount**” for the Registration Statement means 100% of the sum of (i) the number of Common Shares issued pursuant to the Securities Purchase Agreement and (ii) the number of Warrant Shares issued and issuable pursuant to the Warrants as of the trading day immediately preceding the applicable date of determination, all, subject to adjustment as provided in Section 2(b) (without regard to any limitations on exercise of the Warrants).

m. “**Rule 415**” means Rule 415 promulgated under the 1933 Act or any successor rule providing for offering securities on a continuous or delayed basis.

n. “**SEC**” means the United States Securities and Exchange Commission.

o. “**Staff**” means the Staff of the Division of Corporation Finance of the SEC.

2. Registration.

a. Mandatory Registration. The Company shall prepare, and, as soon as practicable but in no event later than the Filing Deadline, file with the SEC the Registration Statement on Form S-1 covering the resale of at least the number of shares of Common Stock equal to the Required Registration Amount determined as of date the Registration Statement is initially filed with the SEC. The Registration Statement shall contain (except if otherwise directed by the Required Holders or required in order to address comments to the Registration Statement received from the Staff) the “Selling Stockholders” and “Plan of Distribution” sections in substantially the form attached hereto as Exhibit B. The Company shall use its commercially reasonable efforts to have the Registration Statement declared effective by the SEC as soon as practicable, but in no event later than the Effectiveness Deadline. By 5:30 p.m. (Eastern time) on the second Business Day following the Effective Date, the Company shall file with the SEC, in accordance with Rule 424 under the 1933 Act, the final prospectus to be used in connection with sales pursuant to such Registration Statement.

b. Rule 415; Cutback. If at any time the Staff takes the position that the offering of some or all of the Registrable Securities in a Registration Statement is not eligible to be made on a delayed or continuous basis under the provisions of Rule 415 under the 1933 Act or requires any Investor to be named as an “underwriter”, the Company shall use commercially reasonable efforts to persuade the Staff that the offering contemplated by the Registration Statement is a valid secondary offering and not an offering “by or on behalf of the issuer” as defined in Rule 415 and that none of the Investors is an “underwriter.” In the event that, despite the Company’s commercially reasonable efforts and compliance with the terms of this Section 2(b), the Staff refuses to alter its position, the Company shall (i) remove from the Registration Statement such portion of the Registrable Securities (the “**Cut Back Shares**”) and/or (ii) agree to such restrictions and limitations on the registration and resale of the Registrable Securities as the Staff may require to assure the Company’s compliance with the requirements of Rule 415 (collectively, the “**SEC Restrictions**”); provided, however, that the Company shall not agree to name any Investor as an “underwriter” in such Registration Statement without the prior written consent of such Investor. Any cut-back imposed pursuant to this Section 2(b) shall be allocated among the Investors on a pro rata basis, unless the SEC Restrictions otherwise require or provide or the Required Holders otherwise agree. No liquidated damages shall accrue as to any Cut Back Shares until such date as the Company is able to effect the registration of such Cut Back Shares in accordance with any SEC Restrictions (such date, the “**Restriction Termination Date**” of such Cut Back Shares). In furtherance of the foregoing, each Investor shall provide the Company with prompt written notice of its sale of substantially all of the Registrable Securities under the Registration Statement such that the Company will be able to file one or more additional registration statements covering the Cut Back Shares. From and after the Restriction Termination Date applicable to any Cut Back Shares, all of the provisions of this Section 2 (including the liquidated damages provisions) shall again be applicable to such Cut Back Shares; provided, however, that (i) the Filing Deadline for the Registration Statement including such Cut Back Shares shall be ten (10) Business Days after such Restriction Termination Date and (ii) the Effectiveness Deadline with respect to such Cut Back Shares shall be the earlier of (A) 120 days after the Restriction Termination Date and (B) five Trading Days following the date on which the Staff notifies the Company that either (x) such Registration Statement is not subject to review (y) or the Staff has no further comments to such Registration Statement.

c. Form S-3. The Company undertakes to register the Registrable Securities on Form S-3 as soon as such form is available for use by the Company, provided that if the Registration Statement is on Form S-1, the Company shall maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form S-3 covering the Registrable Securities has been declared effective by the SEC.

d. Effect of Failure to File and Obtain and Maintain Effectiveness of Registration Statement. Subject to Section 2(b), if (i) a Registration Statement covering all of the Registrable Securities required to be covered thereby and required to be filed by the Company pursuant to this Agreement is (A) not filed with the SEC on or before the Filing Deadline (a “**Filing Failure**”) or (B) not declared effective by the SEC on or before the Effectiveness Deadline (an “**Effectiveness Failure**”); or (ii) on any day after the Effective Date sales of all of the Registrable Securities required to be included on such Registration Statement cannot be made (other than (x) during an Allowable Grace Period (as defined in Section 3(o)) or (y) if the Registration Statement is on Form S-1, for a period of 15 days following the date on which the Company files a post-effective amendment to incorporate the Company’s Annual Report on Form 10-K pursuant to such Registration Statement (including, without limitation, because of a failure to keep such Registration Statement effective, failure to disclose such information as is necessary for sales to be made pursuant to such Registration Statement or failure to register a sufficient number of shares of Common Stock) (a “**Maintenance Failure**”) then, in satisfaction of the damages to any holder of Registrable Securities by reason of any such delay in or reduction of its ability to sell the underlying shares of Common Stock (which remedy shall not be exclusive of any other remedies available at law or in equity), the Company shall pay to each such holder of Registrable Securities relating to such Registration Statement an amount in cash equal to one percent (1.0%) of the aggregate Purchase Price (as such term is defined in the Securities Purchase Agreement) of such Investor’s Registrable Securities included in such Registration Statement on each of the following dates: (i) the day of a Filing Failure and on every thirtieth day (pro rated for shorter periods) thereafter until such Filing Failure is cured; (ii) the day of an Effectiveness Failure and on every thirtieth day (pro rated for shorter periods) thereafter until such Effectiveness Failure is cured; and (iii) the initial day of a Maintenance Failure and on every thirtieth day (pro rated for shorter periods) thereafter until such Maintenance Failure is cured. The payments to which a holder shall be entitled pursuant to this Section 2(d) are referred to herein as “**Registration Delay Payments**.” Registration Delay Payments shall be paid on the earlier of (I) the last day of the calendar month during which such Registration Delay Payments are incurred and (II) the third Business Day after the event or failure giving rise to the Registration Delay Payments is cured. In the event the Company fails to make Registration Delay Payments in a timely manner, such Registration Delay Payments shall bear interest at the rate of one percent (1.0%) of such unpaid Registration Delay Payment per month (pro rated for shorter periods) until paid in full. Notwithstanding anything to the contrary herein or in the Securities Purchase Agreement, in no event shall the aggregate amount of Registration Delay Payments exceed, in the aggregate, ten percent 10% of the aggregate Purchase Price of the Common Shares.

3. Related Obligations.

At such time as the Company is obligated to file a Registration Statement with the SEC pursuant to Section 2(a), 2(b) or 2(c), the Company will use its commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof, and, pursuant thereto, the Company shall have the following obligations:

a. The Company shall submit to the SEC, within two (2) Business Days after the Company learns that no review of a particular Registration Statement will be made by the Staff or that the Staff has no further comments on a particular Registration Statement, as the case may be, a request for acceleration of effectiveness of such Registration Statement to a time and date not later than 48 hours after the submission of such request. The Company shall keep each Registration Statement effective pursuant to Rule 415 at all times until the earlier of (i) the date as of which the Investors may sell all of the Registrable Securities covered by such Registration Statement without restriction pursuant to Rule 144 (or any successor thereto) promulgated under the 1933 Act, or (ii) the date on which the Investors shall have sold all of the Registrable Securities covered by such Registration Statement (the "**Registration Period**"). The Company shall ensure that each Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances in which they were made, not misleading.

b. The Company shall (i) prepare and file with the SEC such amendments (including post-effective amendments) and supplements to the Registration Statement and the Rule 424 prospectus used in connection with such Registration Statement as may be necessary to keep such Registration Statement effective at all times during the Registration Period, and (ii) during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities covered by such Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers as set forth in such Registration Statement.

c. The Company shall furnish to each Investor whose Registrable Securities are included in any Registration Statement, without charge, (i) promptly after the same is prepared and filed with the SEC, at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference, if requested by an Investor, all exhibits and each preliminary prospectus, (ii) upon the effectiveness of any Registration Statement, ten (10) copies of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as such Investor may reasonably request), and (iii) such other documents, including copies of any preliminary or final prospectus, as such Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by such Investor.

d. The Company shall notify each Investor in writing of the happening of any event, as promptly as practicable after becoming aware of such event, as a result of which the prospectus included in a Registration Statement, as then in effect, includes an untrue statement of a material fact or omission to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (provided that in no event shall such notice contain any material, nonpublic information), and, subject to Section 3(o), promptly prepare a supplement or amendment to such Registration Statement to correct such untrue statement or omission, and deliver ten (10) copies of such supplement or amendment to each Investor (or such other number of copies as such Investor may reasonably request).

e. The Company shall use its commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction. If such an order or suspension is issued, the Company shall use its commercially reasonable efforts to obtain the withdrawal of such order or suspension at the earliest possible moment, and to notify each Investor who holds Registrable Securities being sold of the issuance of such order and the resolution thereof, or its receipt of notice of the initiation or threat of any proceeding for such purpose.

f. If any Investor is required under applicable securities law to be described in the Registration Statement as an “underwriter,” at the reasonable request of such Investor, the Company shall furnish to such Investor, on the date of the effectiveness of the Registration Statement and thereafter from time to time on such dates as an Investor may reasonably request, (i) a letter, dated such date, from the Company’s independent certified public accountants in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the Investors, and (ii) an opinion, dated as of such date, of counsel representing the Company for purposes of such Registration Statement, in form, scope and substance as is customarily given in an underwritten public offering, addressed to such Investor.

g. If any Investor is required under applicable securities law to be described in the Registration Statement as an “underwriter,” upon the written request of such Investor in connection with such Investor’s due diligence requirements, if any, the Company shall make available for inspection by (i) such Investor and its legal counsel and (ii) one firm of accountants or other agents retained by the Investors (collectively, the “**Inspectors**”), all pertinent financial and other records, and pertinent corporate documents and properties of the Company (collectively, the “**Records**”), as shall be reasonably deemed necessary by each Inspector solely for the purpose of establishing a due diligence defense under underwriter liability under the 1933 Act, and cause the Company’s officers, directors and employees to supply all information that any Inspector may reasonably request; *provided, however*, that each Inspector shall agree to hold in strict confidence and shall not make any disclosure (except to such Investor) or use of any Record or other information which the Company determines in good faith to be confidential, and of which determination the Inspectors are so notified, unless (a) the disclosure of such Records is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required under the 1933 Act, (b) the release of such Records is ordered pursuant to a final, non-appealable subpoena or order from a court or government body of competent jurisdiction, or (c) the information in such Records has been made generally available to the public other than by disclosure in violation of this or any other Transaction Document. Each

Investor agrees that it shall, upon learning that disclosure of such Records is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt notice to the Company and allow the Company, at its expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, the Records deemed confidential. Nothing herein (or in any other confidentiality agreement between the Company and any Investor) shall be deemed to limit the Investors' ability to sell Registrable Securities in a manner which is otherwise consistent with applicable laws and regulations.

h. The Company shall hold in confidence and not make any disclosure of information concerning an Investor provided to the Company unless (i) the disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation by the Company of this Agreement or any other agreement to which the Company is a party. The Company agrees that it shall, upon learning that disclosure of such information concerning an Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to such Investor and allow such Investor, at the Investor's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

i. The Company shall use its commercially reasonable efforts either to cause all of the Registrable Securities covered by a Registration Statement to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(i).

j. The Company shall cooperate with the Investors who hold Registrable Securities being offered and, to the extent applicable, facilitate the timely preparation and delivery of certificates (not bearing any restrictive legend) representing the Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Investors may reasonably request and registered in such names as the Investors may request.

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

l. The Company shall use its commercially reasonable efforts to cause the Registrable Securities covered by a Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Registrable Securities.

m. The Company shall otherwise use its commercially reasonable efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

n. Within two (2) Business Days after a Registration Statement which covers Registrable Securities is ordered effective by the SEC, the Company shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities (with copies to the Investors whose Registrable Securities are included in such Registration Statement) confirmation that such Registration Statement has been declared effective by the SEC in the form attached hereto as Exhibit A.

o. Notwithstanding anything to the contrary herein, at any time after the Effective Date, the Company may delay the disclosure of material, non-public information concerning the Company the disclosure of which at the time is not, in the good faith opinion of the board of directors of the Company and its counsel, in the commercially reasonable interest of the Company and, in the opinion of counsel to the Company, otherwise required (a **"Grace Period"**); *provided*, that the Company shall promptly (i) notify the Investors in writing of the existence of material, non-public information giving rise to a Grace Period (provided that in each notice the Company will not disclose the content of such material, non-public information to the Investors) and the date on which the Grace Period will begin, and (ii) notify the Investors in writing of the date on which the Grace Period ends; *provided further*, such Grace Periods shall not exceed an aggregate of thirty (30) days during any three hundred sixty five (365) day period and the first day of any Grace Period must be at least five (5) trading days after the last day of any prior Grace Period (each, an **"Allowable Grace Period"**). For purposes of determining the length of a Grace Period above, the Grace Period shall begin on and include the date the Investors receive the notice referred to in clause (i) and shall end on and include the later of the date the Investors receive the notice referred to in clause (ii) or the date referred to in such notice. The provisions of Section 3(e) hereof shall not be applicable during the period of any Allowable Grace Period. Upon expiration of the Grace Period, the Company shall again be bound by the first sentence of Section 3(d) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor, in accordance with the terms of the Securities Purchase Agreement, in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale prior to the Investor's receipt of the notice of a Grace Period and for which the Investor has not yet settled, and deliver a copy of the prospectus included as part of the applicable Registration Statement (unless an exemption from such prospectus delivery requirement exists).

4. Obligations of the Investors.

a. At least five (5) Business Days prior to the first anticipated filing date of a Registration Statement, the Company shall notify each Investor in writing of the information the Company requires from each such Investor if such Investor elects to have any of such Investor's Registrable Securities included in such Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that (i) such Investor furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the effectiveness of the registration of such Registrable Securities, and (ii) the Investor execute such documents in connection with such registration as the Company may reasonably request.

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

c. Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(e) or the first sentence of 3(d), such Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until such Investor's receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(e) or the first sentence of 3(d) or receipt of notice that no supplement or amendment is required. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor, in accordance with the terms of the Securities Purchase Agreement, in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(e) or the first sentence of 3(d), and for which the Investor has not yet settled.

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

5. Expenses of Registration.

All reasonable expenses, other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for the Company, shall be paid by the Company.

6. Indemnification.

In the event any Registrable Securities are included in a Registration Statement under this Agreement:

a. To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend each Investor, the directors, officers, members, partners and employees of, and each Person, if any, who controls any Investor within the meaning of the 1933 Act or the Securities Exchange Act of 1934 Act, as amended (the “**Exchange Act**”) (each, an “**Indemnified Person**”), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys’ fees, amounts paid in settlement or expenses, joint or several, (collectively, “**Claims**”) incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto, to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto, or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus if used prior to the effective date of such Registration Statement, or contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in the light of the circumstances under which the statements therein were made, not misleading, or (iii) any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to a Registration Statement (the matters in the foregoing clauses (i) through (iii) being, collectively, “**Violations**”). Subject to Section 6(c), the Company shall reimburse the Indemnified Persons, promptly as such expenses are incurred and are due and payable, for any legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a) shall not apply to (A) a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by such Indemnified Person for such Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto, (B) a Claim by an Indemnified Person arising out of or based the use by an Investor of an outdated or defective prospectus after the Company has notified such Investor in writing that the prospectus is outdated or defective or (C) a Claim by an Indemnified Person arising out of or based an Investor’s (or any other Indemnified Person’s) failure to send or give a copy of the prospectus or supplement (as then amended or supplemented), if required (and not exempted) to the Persons asserting an untrue statement or omission or alleged untrue statement or omission at or prior to the written confirmation of the sale of Registrable Securities or (D) amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed.

b. In connection with any Registration Statement in which an Investor is participating, each such Investor agrees to severally and not jointly indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors and officers, each of the other holders of the Company's securities covered by such Registration Statement, each Person who controls the Company or any other such Person within the meaning of the 1933 Act or the 1934 Act (each, an "**Indemnified Party**"), against any Claim to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim arise out of or are based upon any Violation that occurs in reliance upon and in conformity with written information furnished to the Company by such Investor expressly for use in connection with such Registration Statement; and, subject to Section 6(c), such Investor will reimburse any legal or other expenses reasonably incurred by an Indemnified Party in connection with investigating or defending any such Claim; *provided, however*, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of such Investor, which consent shall not be unreasonably withheld or delayed; provided, further, however, that the Investor shall be liable under this Section 6(b) for only that amount of a Claim as does not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement.

c. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; *provided, however*, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses of not more than one counsel for such Indemnified Person or Indemnified Party to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. In the case of an Indemnified Person, legal counsel referred to in the immediately preceding sentence shall be selected by the Investors holding at least a majority in interest of the Registrable Securities included in the Registration Statement to which the Claim relates. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or Claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person reasonably apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent; *provided, however*, that the indemnifying party shall not unreasonably withhold, delay

or condition its consent. No indemnifying party shall, without the prior written consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such Claim or litigation, and such settlement shall not include any admission as to fault on the part of the Indemnified Party. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

d. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received.

The indemnity agreements contained herein shall be in addition to any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution.

To the extent any indemnification contemplated hereby by an indemnifying party is prohibited or limited by applicable law, the indemnifying party shall to the extent permitted by applicable law contribute to the amount paid or payable by such Indemnified Person or Indemnified Party as a result of such Claim in such proportion as is appropriate to reflect the relative fault of the indemnifying party, on the one hand, and of the Indemnified Person or Indemnified Party, on the other, in connection with such Violation. The relative fault of the indemnifying party, on the one hand and of the Indemnified Person or Indemnified Party, on the other hand, shall be determined by a court of law by reference to, among other things, whether the Violation relates to information supplied or actions undertaken by the indemnifying party, on the one hand, or by the Indemnified Person or Indemnified Party, on the other hand, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such Violation; provided, that in no event shall any contribution by a Investor hereunder exceed the amount of net proceeds to such Investor of the Registrable Securities sold in any such Registration Statement. The amount paid or payable by a party as a result of any Claim shall be deemed to include, subject to the limitations set forth in this Agreement, any reasonable attorneys' or other reasonable fees or expenses incurred by such party in connection with any proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in Section 6 was available to such party in accordance with its terms. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. The Investors' obligations to contribute pursuant to this Section 7 are several and not joint.

8. Reports Under the 1934 Act.

With a view to making available to the Investors the benefits of Rule 144 promulgated under the 1933 Act or any other similar rule or regulation of the SEC that may at any time permit the Investors to sell securities of the Company to the public without registration (“**Rule 144**”), the Company agrees to:

- a. make and keep public information available, as those terms are understood and defined in Rule 144, during the Registration Period;
- b. file with the SEC in a timely manner all reports and other documents required of the Company under the 1934 Act, during the Registration Period; and
- c. furnish to each Investor so long as such Investor owns Registrable Securities, promptly upon request during the Registration Period, (i) a written statement by the Company, if true, that it has complied with the reporting requirements of Rule 144, the 1933 Act and the 1934 Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities without registration pursuant to Rule 144.

9. Assignment of Registration Rights.

The rights under this Agreement shall be automatically assignable by the Investors to any transferee of all or any portion of such Investor’s Registrable Securities if: (i) the Investor agrees in writing with the transferee or assignee to assign such rights and a copy of such agreement is furnished to the Company within a reasonable time after such assignment; (ii) the Company is, within a reasonable time after such transfer or assignment, furnished with written notice of (a) the name and address of such transferee or assignee and (b) the securities with respect to which such registration rights are being transferred or assigned; (iii) immediately following such transfer or assignment the further disposition of such securities by the transferee or assignee is restricted under the 1933 Act or applicable state securities laws; (iv) at or before the time the Company receives the written notice contemplated by clause (ii) of this sentence the transferee or assignee agrees in writing with the Company to be bound by all of the provisions contained herein; and (v) such transfer shall have been made in accordance with the applicable requirements of the Securities Purchase Agreement.

10. Amendment of Registration Rights.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Required Holders. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon each Investor and the Company. No such amendment shall be effective if it applies to less than all of the holders of the Registrable Securities. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of this Agreement unless the same consideration also is offered to all of the parties to this Agreement. Notwithstanding the foregoing, the Company may update the Schedule of Buyers attached hereto to reflect the addition of a successor Investor in compliance with the provisions of Section 9 without the consent of the Investors.

11. Miscellaneous.

a. A Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from the such record owner of such Registrable Securities.

b. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by electronic mail (provided confirmation of transmission is electronically generated and kept on file by the sending party); or (iii) one (1) Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

Minerva Neurosciences, Inc.
1601 Trapelo Road
Suite 284
Waltham, MA 02451
E-mail: mlevine@minervaneurosciences.com
Attention: Mark Levine

with a copy (for informational purposes only) to:

Cooley LLP
500 Boylston Street
14th Floor
Boston, MA 02116
E-mail: mrecht@cooley.com
Attention: Marc Recht

If to an Investor, to its physical and electronic mail address set forth on the Schedule of Buyers attached hereto, with copies to such Investor's representatives as set forth on the Schedule of Buyers, or to such other physical or electronic mail address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) electronically generated by the sender's electronic mail containing the time, date, recipient electronic mail address of such transmission or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by electronic mail or receipt from an overnight courier service in accordance with clause (i), (ii) or (iii) above, respectively.

c. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.

d. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. 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 herewith or with any transaction contemplated hereby or discussed herein, 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 to such party at the address for such 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. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

e. This Agreement, the other Transaction Documents (as defined in the Securities Purchase Agreement) and the instruments referenced herein and therein constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement, the other Transaction Documents and the instruments referenced herein and therein supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.

f. Subject to the requirements of Section 9, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto.

g. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

h. This Agreement may be executed in identical counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement. This Agreement, once executed by a party, may be delivered to the other party hereto by facsimile transmission of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

i. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j. All consents and other determinations required to be made by the Investors pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Required Holders.

k. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

l. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

m. The obligations of each Investor hereunder are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor hereunder. Nothing contained herein, and no action taken by any Investor pursuant hereto, shall be deemed to constitute the Investor as, and the Company acknowledges that the Investors do not so constitute, a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group, and the Company will not assert any such claim with respect to such obligations or the transactions contemplated herein.

* * * * *

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

COMPANY:

MINERVA NEUROSCIENCES, INC.

By: /s/ Remy Luthringer

Name: Remy Luthringer

Title: President & CEO

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

BUYERS:

[BUYERS]

By: _____
Name:
Title:

[EXECUTED SIGNATURE PAGES OF BUYERS INTENTIONALLY OMITTED]

**FORM OF NOTICE OF EFFECTIVENESS
OF REGISTRATION STATEMENT**

[]
[]
[]
Attention: []

Re: []

Ladies and Gentlemen:

We are counsel to Minerva Neurosciences, Inc., a Delaware corporation, with its principal offices at 1601 Trapelo Road, Suite 284, Waltham, MA 02451 (the “**Company**”), and have represented the Company in connection with that certain Securities Purchase Agreement (the “**Securities Purchase Agreement**”), entered into by and among the Company and the buyers named therein (collectively, the “**Holders**”) pursuant to which the Company issued to the Holders its shares of the Company’s Common Stock, par value \$0.0001 per share (the “**Common Stock**”) and warrants exercisable for shares of Common Stock (the “**Warrants**”). Pursuant to the Securities Purchase Agreement, the Company also has entered into a Registration Rights Agreement with the Holders (the “**Registration Rights Agreement**”) pursuant to which the Company agreed, among other things, to register the resale of the Registrable Securities (as defined in the Registration Rights Agreement), including the shares of Common Stock issuable upon exercise of the Warrants under the Securities Act of 1933, as amended (the “**1933 Act**”). In connection with the Company’s obligations under the Registration Rights Agreement, on _____, 2015, the Company filed a Registration Statement on Form S-1 (File No. 333-_____) (the “**Registration Statement**”) with the Securities and Exchange Commission (the “**SEC**”) relating to the Registrable Securities which names each of the Holders as a selling stockholder thereunder.

In connection with the foregoing, we advise you that a member of the SEC’s staff has advised us by telephone that the SEC has entered an order declaring the Registration Statement effective under the 1933 Act at [X] on [X] and we have no knowledge, after telephonic inquiry of a member of the SEC’s staff, that any stop order suspending its effectiveness has been issued or that any proceedings for that purpose are pending before, or threatened by, the SEC and the Registrable Securities are available for resale under the 1933 Act pursuant to the Registration Statement.

Exhibit A-1

This letter shall serve as our standing instruction to you that the shares of Common Stock are freely transferable by the Holders pursuant to the Registration Statement. You need not require further letters from us to effect any future legend-free issuance or reissuance of shares of Common Stock to the Holders as contemplated by the Company's Irrevocable Transfer Agent Instructions dated [✕] __, 2015 provided at the time of such reissuance, the Company has not otherwise notified you that the Registration Statement is unavailable for the resale of the Registrable Securities.

Very truly yours,

COOLEY LLP

By: _____

CC: [LIST NAMES OF HOLDERS]

Exhibit A-2

SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders are those previously issued to the selling stockholders and those issuable to the selling stockholders upon exercise of the warrants. For additional information regarding the issuances of common stock and the warrants, see “Private Placement of Common Shares and Warrants” above. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. [Except for the ownership of the shares of common stock and the warrants, the selling stockholders have not had any material relationship with us within the past three years.]

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling shareholder, based on its ownership of the shares of common stock and the warrants, as of _____, 20[], assuming exercise of the warrants held by the selling stockholders on that date, without regard to any limitation on exercise.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholders.

In accordance with the terms of registration rights agreements with the holders of the shares of common stock and the warrants, this prospectus generally covers the resale of that number of shares of common stock equal to the number of shares of common stock issued and the shares of common stock issuable upon exercise of the related warrants, determined as if the outstanding warrants were exercised, as applicable, in full, in each case as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

<u>Name of Selling Stockholder</u>	<u>Number of Shares Owned Prior to Offering</u>	<u>Maximum Number of Shares to be Sold Pursuant to this Prospectus</u>	<u>Number of Shares Owned After Offering</u>
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Exhibit B-1

PLAN OF DISTRIBUTION

We are registering the shares of common stock previously issued and the shares of common stock issuable upon exercise of the warrants to permit the resale of these shares of common stock by the holders of the common stock and warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholders may sell all or a portion of the shares of Common Stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Common Stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of Common Stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions,

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;

Exhibit B-2

-
- sales pursuant to Rule 144;
 - broker-dealers may agree with the selling securityholders to sell a specified number of such shares at a stipulated price per share;
 - a combination of any such methods of sale; and
 - any other method permitted pursuant to applicable law.

If the selling stockholders effect such transactions by selling shares of Common Stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of Common Stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of Common Stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of Common Stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of Common Stock short and deliver shares of Common Stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of Common Stock to broker-dealers that in turn may sell such shares.

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

The selling stockholders and any broker-dealer participating in the distribution of the shares of Common Stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of Common Stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of Common Stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of Common Stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Common Stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the shares of Common Stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of Common Stock by the selling stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Common Stock to engage in market-making activities with respect to the shares of Common Stock. All of the foregoing may affect the marketability of the shares of Common Stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Common Stock.

We will pay all expenses of the registration of the shares of Common Stock pursuant to the registration rights agreement, estimated to be \$[✕] in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “Blue Sky” laws; *provided, however*, that a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreements, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreement, or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of Common Stock will be freely tradable in the hands of persons other than our affiliates.

Exhibit B-4



For Immediate Release

Minerva Neurosciences Completes Private Placement, Raises \$31 Million

WALTHAM, Mass. – March 18, 2015 – Minerva Neurosciences, Inc. (Nasdaq:NERV) today announced that it has closed the private placement announced on March 13, 2015. Investors in the private placement included Federated Investors, Inc., Highland Capital, Perceptive Advisors, LLC, Cormorant Asset Management LLC, Johnson & Johnson Innovation – JJDC, Index Ventures and Dafna Capital Mgmt LLC.

Pursuant to the stock purchase agreement, Minerva issued 6,281,661 shares of common stock and warrants to purchase up to 6,281,661 shares, with the gross proceeds of the offering totaling approximately \$31 million. The purchase price for the common stock was \$4.81 per share. The purchase price for the warrants was \$0.125 per share of common stock subject to such warrants. The warrants have an exercise price of \$5.772 per share.

“With the completion of this financing, we are now well positioned to continue our efforts to advance our pipeline of promising treatments for a range of central nervous system disorders,” said Dr. Remy Luthringer, president and CEO of Minerva.

Jefferies LLC acted as sole placement agent in connection with the private placement.

About Minerva Neurosciences

Minerva Neurosciences, Inc. is a clinical-stage biopharmaceutical company focused on the development and commercialization of a portfolio of product candidates to treat central nervous system diseases. Minerva is developing first-in-class proprietary compounds, including its lead program MIN-101 in development for the treatment of schizophrenia, MIN-202 in development for primary and comorbid insomnia, MIN-117 in development for the treatment of major depressive disorder and MIN-301 in development for the treatment of Parkinson’s disease. Minerva’s common stock is listed on the NASDAQ Global Market where it trades under the symbol “NERV”.

Forward-Looking Safe-Harbor Statement:

This press release contains forward-looking statements which are subject to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts, reflect management’s expectations as of the date of this press release, and involve certain risks and uncertainties. Forward-looking statements include statements herein with respect to the benefits of and our ability to leverage the proceeds of the private placement and management’s ability to successfully achieve its goals. These forward-looking statements are only predictions and may differ materially from actual results due to a variety of factors including, without limitation, whether any of our other therapeutic products will advance further in the clinical trials process and whether and when, if at all, they will receive final approval from the U.S. Food and Drug Administration or equivalent

foreign regulatory agencies and for which indications; whether any of our therapeutic products will be successfully marketed if approved; whether any of our therapeutic product discovery and development efforts will be successful; our ability to achieve the results contemplated by our co-development agreements; management's ability to successfully achieve its goals; our ability to raise additional capital to fund our operations on terms acceptable to us; and general economic conditions. These and other potential risks and uncertainties that could cause actual results to differ from the results predicted are more fully detailed under the caption "Risk Factors" in our filings with the Securities and Exchange Commission, including our Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, filed with the Securities and Exchange Commission on November 6, 2014. Copies of reports filed with the SEC are posted on our website at www.minervaneurosciences.com. The forward-looking statements in this press release are based on information available to us as of the date hereof, and we disclaim any obligation to update any forward-looking statements, except as required by law.

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renee@stemir.com