

# MINERVA NEUROSCIENCES, INC.

## **FORM 8-K** (Current report filing)

Filed 06/14/17 for the Period Ending 06/13/17

Address	1601 TRAPELO ROAD SUITE 284 WALTHAM, MA 02451
Telephone	617-600-7373
CIK	0001598646
Symbol	NERV
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Medical Research
Sector	Healthcare
Fiscal Year	12/31

---

---

**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): June 13, 2017

---

**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))

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

Emerging growth company

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

---

---

## **Item 1.01 Entry into a Material Definitive Agreement**

### *Amendment to Co-Development and License Agreement*

On June 13, 2017, Minerva Neurosciences, Inc., a Delaware corporation (the “Company” or “Minerva”) entered into an amendment to that certain Co-Development and License Agreement between the Company and Janssen Pharmaceutica NV, one of the Janssen Pharmaceutical Companies of Johnson & Johnson (“Janssen”), related to the Company’s MIN-202 product candidate (the “Amendment”).

Pursuant to the Amendment, Minerva will gain global strategic control of the development of MIN-202 to treat insomnia, and Janssen will forego its right to royalties on MIN-202 insomnia sales in Minerva territories. Minerva will retain its current rights to MIN-202 as adjunctive therapy for major depressive disorder (MDD), which include an exclusive license in the European Union, Switzerland, Liechtenstein, Iceland and Norway, with royalties payable by Minerva to Janssen, and royalties on sales payable by Janssen to Minerva elsewhere worldwide.

Janssen has agreed to make an upfront payment to Minerva of \$30 million upon the effectiveness of the Amendment. Janssen has also agreed to make a \$20 million payment at the start of a Phase 3 insomnia trial for MIN-202, a \$20 million payment when 50% of the patients are enrolled in this trial, and further agreed to waive the remaining payments due from Minerva for Phase 2 development of MIN-202, which total approximately \$13 million.

Upon the effectiveness of the Amendment, Minerva will assume all financial responsibility for Phase 3 development costs for MIN-202 in insomnia. The effectiveness of the Amendment is contingent upon the closing of Johnson and Johnson’s pending acquisition of Actelion Ltd. and approval by the European Commission.

### *Stock Repurchase Agreement*

On June 13, 2017, in connection with the Amendment, Minerva also entered into a stock repurchase agreement with Johnson & Johnson Innovation-JJDC Inc. to repurchase all of the approximately 3.9 million shares of Minerva stock held by Johnson & Johnson Innovation-JJDC Inc. at a per share price of \$0.0001, for an aggregate purchase price of approximately \$389 (the “Stock Repurchase Agreement”). The effectiveness of the Stock Repurchase Agreement is contingent upon the closing of Johnson and Johnson’s pending acquisition of Actelion Ltd. and approval by the European Commission.

The foregoing description of the Amendment and the Stock Repurchase Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Amendment and the Stock Repurchase Agreement, which are filed as Exhibits 10.1 and 10.2 to this Current Report on Form 8-K and incorporated by reference herein.

## **Item 9.01. Financial Statements and Exhibits**

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
10.1	Amendment No. 1 to Co-Development and License Agreement dated June 13, 2017, by and between Minerva Neurosciences, Inc. and Janssen Pharmaceutica NV.
10.2	Stock Repurchase Agreement dated June 13, 2017 by and between Minerva Neurosciences, Inc. and Johnson & Johnson Innovation-JJDC Inc.

---

**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 S. Levine  
Name: Mark S. Levine  
Title: Senior Vice President, General Counsel and Secretary

Date: June 14, 2017

---

**INDEX OF EXHIBITS**

<u>Exhibit No.</u>	<u>Description</u>
10.1	Amendment No. 1 to Co-Development and License Agreement dated June 13, 2017, by and between Minerva Neurosciences, Inc. and Janssen Pharmaceutica NV.
10.2	Stock Repurchase Agreement dated June 13, 2017 by and between Minerva Neurosciences, Inc. and Johnson & Johnson Innovation-JJDC Inc.

**AMENDMENT NO. 1  
TO  
CO-DEVELOPMENT AND LICENSE AGREEMENT**

This **A M E N D M E N T N O . 1 T O C O - D E V E L O P M E N T A N D L I C E N S E A G R E E M E N T** (this “**Amendment**”), dated as of June 13, 2017 (the “**Amendment Execution Date**”), is made by and between Janssen Pharmaceutica NV, a corporation organized and existing under the laws of Belgium (“**Janssen**”) and Minerva Neurosciences, Inc., a corporation organized under the laws of the State of Delaware (“**Minerva**”). Janssen and Minerva are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**.”

**W H E R E A S**, the Parties have previously entered into that certain Co-Development and License Agreement dated as of February 13, 2014 (the “**License Agreement**”) (capitalized terms used herein but not otherwise defined shall have the meaning ascribed to such terms in the License Agreement); and

**W H E R E A S**, the Parties now desire to amend the License Agreement as set forth herein;

**N O W , T H E R E F O R E**, in consideration of the foregoing, of the mutual promises set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto, intending legally to be bound, hereby agree as follows:

**ARTICLE I**

**A M E N D M E N T O F L I C E N S E A G R E E M E N T**

1.1. The amendments to the License Agreement set forth in this Article I shall take effect on the Amendment Effective Date.

1.2. Clause (ii) of Section 2.1 of the License Agreement is hereby deleted in its entirety and replaced with the following:

“(ii) solely for purposes of seeking Regulatory Approval of Licensed Products in the Minerva Territory in the Field or solely for purposes of supporting Regulatory Approval of Licensed Products in the Janssen Territory in the insomnia indication (*provided, however*, that such license shall not alter the rights and obligations of the Parties under Section 3.11)”

1.3. Clause (ii) of Section 2.3 of the License Agreement is hereby deleted in its entirety and replaced with the following:

“(ii) solely for purposes of seeking Regulatory Approval of Licensed Products in the Minerva Territory in the Field (outside of the insomnia indication) or solely for purposes of supporting Regulatory Approval of Licensed Products in the Janssen Territory in the insomnia indication (*provided, however*, that such license shall not alter the rights and obligations of the Parties under Section 3.11)”

1.4. Clause (i) of Section 3.3(c) of the License Agreement is hereby deleted in its **entirety and replaced with the following**:

“(i) If the disputed matter relates to the Development or Manufacture of a Licensed Product, including any amendment of the Development Plan or Development Budget, then (A) Minerva shall have final decision making authority to the extent such matter relates to the Development of a Licensed Product for the insomnia indication (*provided, however*, that Minerva shall not have the right to amend the preclinical studies, safety studies or Phase I Trials set forth on Annex 1 (the “**Ongoing Preclinical/Safety/Phase I Studies**”) without the prior written approval of Janssen) and (B) otherwise, Janssen shall have final decision making authority (*provided, however*, that if Janssen and Minerva disagree on whether any action in respect of quality, regulatory and medical safety issues that Janssen is taking in the Development of a Licensed Product for any indication other than the insomnia indication (or Minerva is taking in relation to the insomnia indication) could have an adverse impact on the Development of a Licensed Product for the insomnia indication (or any indication other than the insomnia indication, in the case of Janssen), the matter (an “**Expert Dispute**”) will be referred upon the request of either Party to an independent Third Party expert in accordance with Section 13.6).”

1.5. Clause (i) of Section 3.10(f) of the License Agreement is hereby deleted in its entirety and replaced with the following:

“(i) **Cost Sharing** .

- (A) After the Amendment Effective Date, Janssen shall be solely responsible for all Development Costs (including any Development Costs payable by Minerva but not yet paid as of the Amendment Effective Date (which Janssen hereby expressly waives)) for the Phase II Trials MDD2001, MDD2002, and ISM2005, the Ongoing Preclinical/Safety/Phase I Studies, the preclinical studies, safety studies and Phase I Trials set forth on Annex 2 (collectively, the “**DP4 Activities**”). Minerva shall have no further obligation to share in any Development Costs for DP4 Activities. Minerva may not exercise its final decision making authority under Section 3.3(c)(i) to amend the Development Plan or the Development Budget in a manner that would increase Development Costs for the DP4 Activities above (or would accelerate such Development Costs, so that they would be incurred sooner) than the total amounts budgeted for the DP4 Activities in (x) the preliminary budget attached hereto as Annex 3 or (y) if the JSC has approved a Development Budget, the latest Development Budget approved by the JSC (without the exercise of final decision making authority by either Party). Notwithstanding the foregoing, if Janssen does not consent to any such increase or acceleration, then (1) Minerva may

---

elect to fund one hundred percent (100%) of such additional or accelerated Development Costs and (2) if Minerva makes such an election, the JSC will update the applicable activity in the Development Plan to reflect such increase or acceleration.

- (B) After the Amendment Effective Date, Janssen shall be solely responsible for all Development Costs described in clause (e) of the definition of “Development Costs” set forth in Section 1.27 that are incurred on or prior to Decision Point 4 (including any such Development Costs payable by Minerva but not yet paid as of the Amendment Effective Date (which Janssen hereby expressly waives)) (any such Development Costs incurred during such period, the “**DP4 PDMS Costs**”). Minerva shall have no further obligation to share in any DP4 PDMS Costs. Minerva may not exercise its final decision making authority under Section 3.3(c)(i) to amend the Development Plan or the Development Budget in a manner that would increase DP4 PDMS Costs above (or would accelerate such Development Costs, so that they would be incurred sooner) than the total amounts budgeted for the DP4 PDMS Costs in (x) the preliminary budget attached hereto as Annex 3 or (y) if the JSC has approved a Development Budget, the latest Development Budget approved by the JSC (without the exercise of final decision making authority by either Party). Notwithstanding the foregoing, if Janssen does not consent to any such increase or acceleration, (1) Minerva may elect to fund one hundred percent (100%) of such additional or accelerated Development Costs and (2) if Minerva makes such an election, the JSC will update the applicable activity in the Development Plan to reflect such increase or acceleration. Janssen may not exercise its final decision making authority under Section 3.3(c)(i) to amend the Development Plan or the Development Budget in a manner that would decrease DP4 PDMS Costs below (or would delay such Development Costs, so that they would be incurred later) than the total amounts budgeted for the DP4 PDMS Costs in (x) the preliminary budget attached hereto as Annex 3 or (y) if the JSC has approved a Development Budget, the latest Development Budget approved by the JSC (without the exercise of final decision making authority by either Party).
- (C) Minerva shall be solely responsible for all Development Costs for Phase III Trials of a Licensed Product in the insomnia indication and related Development activities, including activities related to initiation of such Phase III



Trials (collectively, “ **PIII Insomnia Activities** ”). For purposes of this Section 3.10(f)(i)(C), any clinical trial that satisfies both the definition of Phase II Trial set forth in Section 1.71 and the definition of Phase III Trial set forth in Section 1.74 shall be deemed to be a Phase III Trial. If the Parties disagree as to whether a proposed Phase II Trial in the insomnia indication also satisfies the definition of Phase III Trial, such matter shall be an Expert Dispute that will be referred upon the request of either Party to an Expert in accordance with Section 13.6.

- (D) The Parties shall share, on a sixty percent (60%) to forty percent (40%) basis (Janssen:Minerva), all Development Costs that are not related to DP4 Activities or PIII Insomnia Activities or that are not DP4 PDMS Costs. Notwithstanding the foregoing sentence, the provisions of Section 3.10(c)(ii) shall still apply in the event a Party elects not to share Development Costs in accordance with the provisions of such Section 3.10(c)(ii).
- (E) Notwithstanding the provisions of Section 3.10(f)(i)(D) to the contrary, if either Party exercises its final decision-making authority under Section 3.3(c)(i) to start any activity that is not set forth on Annex 1 or Annex 2 (whether or not such activity is in the Development Plan as of the Amendment Effective Date) prior to Decision Point 4, such Party shall bear one hundred percent (100%) of the Development Costs for such activity that are incurred on or prior to Decision Point 4. For clarity, Development Costs incurred for such activity after Decision Point 4 shall be shared in accordance with Section 3.10(f)(i)(D).”

1.6. Clause (iv) of Section 3.10(f) of the License Agreement is hereby deleted in its entirety.

1.7. Clause (ii) of Section 3.10(g) of the License Agreement is hereby deleted in its entirety and replaced with the following:

“(ii) At any time following Decision Point 4, Minerva shall have the right, but not the obligation, to opt out of further joint Development of the Licensed Products for the Initial Indications and Initial Formulations by giving Janssen written notice of such election, which election shall be effective thirty (30) days after providing such notice and shall constitute a termination of this Agreement pursuant to Section 11.5(a), subject to Section 11.6(b).”

1.8. Clause (iii) of Section 3.10(g) of the License Agreement (excluding subclauses (A) through (G) thereof) is hereby deleted in its entirety and replaced with the following:

“(iii) At any time following Decision Point 4, Janssen shall have the right, but not the obligation, to opt out of further joint Development of the Licensed Products by giving Minerva written notice of such election, which election shall be effective ninety (90) days after providing written notice of such election. In the event that Janssen makes such election (and provided that Minerva does not make a corresponding election pursuant to Section 3.10(g)(ii)):”

1.9. Subclause (F) of Clause (iii) of Section 3.10(g) of the License Agreement is hereby deleted in its entirety and replaced with the following:

“(F) the royalties payable by Minerva pursuant to Section 6.2(a) with respect to Net Sales of Licensed Products sold by Minerva and its Affiliates and Sublicensees in the Minerva Territory (as such territory is amended pursuant to Section 3.10(g)(iii)(A)) that are allocable to an indication other than the insomnia indication shall be reduced to six percent (6%) of such Net Sales, subject to potential further adjustment pursuant to Section 3.10(c)(ii), Section 6.2(b) or Section 6.2(c) (for clarity Minerva is not obligated to pay to Janssen royalties on Net Sales of any Licensed Products sold by Minerva or its Affiliates and Sublicensees in the Minerva Territory (as such territory is amended pursuant to Section 3.10(g)(iii)(A)) allocable to the insomnia indication); and”

1.10. Section 6.2(a) of the License Agreement is hereby deleted in its entirety and replaced with the following:

“(a) **Royalty Rate and Royalty Term** . In accordance with the terms of this Section 6.2, Minerva shall pay to Janssen royalties in the amount of seven percent (7%) of Net Sales of all Licensed Products sold by Minerva and its Affiliates and Sublicensees in the Minerva Territory that are allocable to an indication other than the insomnia indication, subject to any royalty rate reduction made pursuant to Section 3.10(c)(ii), Section 3.10(g)(iii), Section 6.2(b) or Section 6.2(c). Such royalties shall be payable, on a country-by-country and Licensed Product-by-Licensed Product basis, beginning upon First Commercial Sale of a Licensed Product in a particular country in the Minerva Territory that is allocable to an indication other than the insomnia indication until the latest of: (i) the ten (10) year anniversary of the First Commercial Sale of such Licensed Product in such country that is allocable to an indication other than the insomnia indication; (ii) the expiration of the last to expire Janssen Patent or Program Patent Covering (x) the Compound of the Licensed Product as a composition of matter in such country in the Minerva Territory or (y) the labeled use of such Licensed Product for an indication other than the insomnia indication in such country in the Minerva Territory; or (iii) the end of the period during which such Licensed Product is subject to Regulatory Exclusivity in such country (such period for a particular Licensed Product in a particular country, the “**Minerva Royalty Term**”). For clarity, Minerva is not obligated to pay to Janssen royalties on Net Sales of any Licensed Products sold by Minerva or its Affiliates and Sublicensees in the Minerva Territory that are allocable to the insomnia indication. If (A) a Licensed Product is approved in any country in the Minerva Territory for any indication, (B) the Parties expect or anticipate that such Licensed Product will be approved in such country for a second indication and (C) either of such indications is the insomnia indication, then, at least six (6) months before the expected date of approval of

such Licensed Product in such country for the second indication, the JSC will develop and approve a methodology that will be used to allocate Net Sales of such Licensed Product in such country by indication using primary and/or secondary market product level data from Third Party reporting services, such as IMS Health; *provided, however*, that if such data is not available with respect to such country, the JSC will develop and approve an alternate methodology to allocate Net Sales of such Licensed Product in such country by indication. Notwithstanding Section 3.3(c)(ii), in the event the JSC does not approve such a methodology at least three (3) months prior to the anticipated approval of such Licensed Product for such second indication, then the Parties shall mutually select and engage an independent Third Party accounting firm that has no auditing or other financial relationship with either Party or any of its Affiliates to determine such methodology. Such accounting firm shall, as soon as reasonably practicable after such firm is engaged, deliver a report to each Party with its analysis and determination of such methodology. The determination of such firm shall be final and binding on the Parties, and the costs of such firm's services shall be shared equally by the Parties."

1.11. The License Agreement is hereby amended by adding a new Section 6.4 as follows:

**"6.4 Additional Payments and Undertakings .**

(a) As partial consideration for entering into the Amendment, Janssen shall pay a one-time, non-refundable, non-creditable, payment of thirty million dollars (\$30,000,000) to Minerva two (2) Business Days after the Amendment Effective Date.

(b) As partial consideration for entering into the Amendment, Janssen shall pay to Minerva certain milestone payments (" **Milestone Payments** ") following the first occurrence of certain milestone events with respect to a Licensed Product, as set forth in the following table (the " **Milestone Events** "):

<u>Milestone Event</u>	<u>Milestone Payment</u>
Dosing of the fifth patient in a Phase III Trial for the insomnia indication	\$ 20,000,000
50% of the patients are enrolled in the first Phase III Trial for the insomnia indication, based upon the expected patient enrollment as described in the protocol for such Phase III Trial	\$ 20,000,000

Janssen shall pay to Minerva the applicable Milestone Payment in the manner described below after the first occurrence of such applicable Milestone Event with respect to the first Licensed Product. For clarity, each Milestone Payment is payable only once; no Milestone Payment shall be payable for subsequent or repeated achievements of such Milestone Event with one or more of the same or different Licensed Products. Each of the Milestone Payments shall be non-refundable and non-creditable. Minerva shall report to Janssen its achievement of each Milestone Event for which payment to Minerva is due, within ten (10) days after such achievement has occurred, and Minerva shall concurrently therewith invoice Janssen for the applicable Milestone Payment. Janssen will pay each such invoice within sixty (60) days of its receipt thereof."

---

1.12. The License Agreement is hereby amended by adding a new Section 13.6 as follows:

“13.6 **Disputes Relating to Development** . In the event either Party requests the resolution of an Expert Dispute by an independent Third Party expert in accordance with Section 3.3(c)(i), such Expert Dispute shall be resolved as described in this Section 13.6.

(a) Following such request, the Parties shall select and agree upon a mutually acceptable independent, disinterested and impartial Third Party who is knowledgeable in the field of pharmaceutical drug development (the “ **Expert** ”). If the Parties do not mutually agree upon an Expert within fifteen (15) Business Days, then upon request by either Party, an arbitrator appointed by JAMS shall select the Expert from a list of three (3) potential Third Parties provided by each Party.

(b) Within five (5) Business Days following selection or appointment of the Expert, each Party shall provide the Expert and the other Party with a concise written proposal for resolution of the Expert Dispute and the reasons such proposed resolution should be adopted. If so requested by the Expert, each Party shall make oral submissions to the Expert based on such Party’s written proposal delivered pursuant to this Section 13.6(b), and each Party shall have the right to be present during any such oral submissions.

(c) The Expert shall select one of the Party’s proposals as his or her final decision no later than five (5) Business Days after the submission of the written proposals and, if any, oral submissions. In making his/her determination, the Expert shall take into account as a key criteria not causing a material cost and/or delay to the Development of Licensed Products for the insomnia indication. The Expert shall not have the authority to modify either Party’s proposal or render any substantive decision other than to so select the proposal of a Party as set forth in its respective written proposal. The Expert’s determination shall be the final and binding remedy of the Expert Dispute.

(d) Unless otherwise mutually agreed upon by the Parties, the in-person portion (if any) of such proceedings shall be conducted in New York, New York. The Parties shall share equally the costs and fees of the Expert in connection with any proceeding under this Section 13.6. Each Party shall bear its own costs and attorneys’ and witnesses’ fees and associated costs and expenses incurred in connection with any proceeding under this Section 13.6.

(e) The Parties shall use, and shall direct the Expert to use, diligent efforts to resolve any Expert Dispute under this Section 13.6 within twenty (20) Business Days after the selection of the Expert, or if resolution within twenty (20) Business Days is not reasonably achievable, as determined by the Expert, then as soon thereafter as is reasonably practicable.”

---

## ARTICLE II

### CONTINUATION OF LICENSE AGREEMENT

2.1. Except as expressly modified in Article I, the License Agreement shall remain in full force and effect following the Amendment Effective Date.

## ARTICLE III

### GENERAL

3.1. **Governing Law ; Service of Process** . This Amendment shall be governed by and construed under the substantive laws of the State of New York, without regard to conflicts of law or choice of law rules that would provide for application of the law of a jurisdiction outside New York. The Parties agree that service of process upon them in any legal action may be made if delivered in person, by courier service, by telegram, by facsimile or by first class mail, and shall be deemed effectively given upon receipt. Any dispute, claim or controversy that may arise under, out of, in connection with or relating to this Amendment shall be governed by the provisions of Article 13 of the License Agreement.

3.2. **Amendments** . No subsequent alteration, amendment, change or addition to this Amendment shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

3.3. **Headings** . All paragraph headings in this Amendment are for convenience of reference only and will not be construed as a limitation of the scope of the particular sections to which they refer.

3.4. **Counterparts** . This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile signatures, including signatures in a fixed electronic format such as PDF, shall have the same effect as originals.

3.5. **Successors and Assigns** . This Amendment may only be assigned by a Party in connection with an assignment of the License Agreement in accordance with the provisions of Section 14.7 of the License Agreement. This Amendment will apply to, inure to the benefit of and be binding upon the Parties hereto and upon their respective successors and permitted assigns. The Parties agree that this Amendment is not intended by either Party to give any benefits, rights, privileges, actions or remedies to any person, partnership, firm or corporation as a third party beneficiary or otherwise under any theory of law, except as expressly set forth herein.

3.6. **Severability** . If any one or more of the provisions of this Amendment is held to be invalid or unenforceable by any court of competent jurisdiction from which no appeal can be or is taken, the provision shall be considered severed from this Amendment and shall not serve to invalidate any remaining provisions hereof. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable provision such that the objectives contemplated by the Parties when entering this Amendment may be realized.

---

3.7. **Entire Agreement** . The License Agreement, as amended by this Amendment, constitutes the entire understanding among the Parties with respect to the subject matter hereof and thereof and supersedes all prior discussions, writings and agreements (oral or written) relating to the subject matter hereof and thereof.

3.8. **Effectiveness** .

(a) For purposes of this Amendment, “ *Amendment Effective Date* ” means the Closing Date (as defined in the Stock Repurchase Agreement, dated as of the Amendment Execution Date, by and between Minerva and Johnson & Johnson Innovation-JJDC Inc. (f/k/a Johnson & Johnson Development Corporation), an Affiliate of Janssen (the “ *Stock Repurchase Agreement* ”)).

(b) This Amendment shall automatically terminate, without any further action on the part of either Party, if (i) the Amendment Effective Date does not occur on or prior to August 31, 2017, unless the Parties mutually agree to a later date or (ii) the Stock Repurchase Agreement is terminated in accordance with its terms prior to the occurrence of Amendment Effective Date. In the event of the termination of this Amendment, neither Janssen nor Minerva shall have any liability or obligation to the other under or in respect of this Amendment, except to the extent of any fraud or intentional or willful breach of this Amendment. In the event of any such termination, (i) the License Agreement shall continue in full force and effect in accordance with its terms, (ii) this Amendment shall become void and have no effect and (iii) the amendments to the License Agreement set forth in Article I shall be abandoned without further action by the Parties hereto, except that the provisions of this Article III shall survive the termination of this Amendment.

---

**I N W I T N E S S W H E R E O F** , the Parties hereto have caused this Amendment to be executed and delivered as of the Amendment Execution Date.

**J A N S S E N P H A R M A C E U T I C A N V**

By:  /s/ Tom Aelbrecht

Name: Tom Aelbrecht

Title: Head Janssen Campus Office

Member of the Management Board

By:  /s/ Stef Heylen

Name: Stef Heylen

Title: Chief Operating Officer, Janssen R&D

Managing Director – Chairman of the Management Board

**M I N E R V A N E U R O S C I E N C E S , I N C .**

By:  /s/ Remy Luthringer

Name: Remy Luthringer, Ph.D.

Title: President and CEO

**S I G N A T U R E P A G E T O A M E N D M E N T N O . 1 T O  
L I C E N S E A G R E E M E N T**

---

**Annex 1**

**Ongoing Preclinical/Safety/Phase I Studies**

1. 428479922EDI1014 SD Elderly PK Study [Completed]
2. 42847922EDI1008 C-14 ADME (AM) Study
3. Carc study 2y rats [started March 2017] <sup>1</sup>
4. Carc 1mo rep [started June 2017] <sup>2</sup>

---

<sup>1</sup> Note: The budgeted amount for this study is included in the line item entitled "DSSc" on Annex 3.

<sup>2</sup> Note: The budgeted amount for this study is included in the line item entitled "DSSc" on Annex 3.



---

**Annex 2**

**Planned Preclinical/Safety/Phase I Studies**

1. 42847922MDD1003 Oral Contraceptives DDI [scheduled to start Sept 2017]
2. 42847922MDD1004 Relative BA & Food Effect [scheduled to start 1H 2018]
3. 42847922MDD1007 Thorough QT Study [scheduled to start Dec 2017]
4. 42847922MDD1009 Phase 1b MDD Monotherapy Trial [scheduled to start July 2017]<sup>3</sup>
5. Rat fertility [scheduled to start Mar 2018], if determined to be necessary.<sup>4</sup>
6. EDI1015 / DDI1015 [scheduled to start 2018, following consultation with Health Authorities to potentially replace with modeling]
7. Renal Impairment [protocol still to be developed]
8. Hepatic Impairment [protocol still to be developed]

The following studies are scheduled to start after Decision Point 4, but if Janssen exercises its final decision-making authority to commence any of such studies prior to Decision Point 4, such studies shall be considered DP4 Activities:

1. 42847922MDD1006 Driving Study in Elderly HV
2. 42847922MDD1005 Driving Study in Healthy Volunteers
3. 42847922M1008 Abuse Liability
4. Juv. tox 3mo rat<sup>5</sup>

---

<sup>3</sup> Note: The proposed budgeted amount for this study has not yet been presented to or discussed by the JDT or approved by the JSC, so is not shown on Annex 3. For clarity, this does not affect Janssen's obligations under Section 3.10(f)(i) to be solely responsible for all Development Costs for this study.

<sup>4</sup> Note: The budgeted amount for this study is included in the budget line item entitled "DSSc" on Annex 3.

<sup>5</sup> Note: The budgeted amount for this study is included in the budget line item entitled "DSSc" on Annex 3.

---

**Annex 3**

**Preliminary Development Budget**

**[See attached.]**

Note: The FTE numbers and dollar amounts shown on Annex 3 reflect the number of employees expected to be necessary to conduct the budgeted Development Plan studies. The Parties acknowledge that Minerva sent a proposal to Janssen on April 28 that includes FTE numbers and dollar amounts for Minerva employees. Because the JDT has not yet discussed and the JSC has not yet approved this proposal, it is not reflected on Annex 3. The Parties agree that the JDT will discuss this proposal at its first meeting that occurs after the Amendment Effective Date.

---

# Preliminary budget 2017, 2018 & 2019

**Orexin II**  
*April 7, 2017*



# Preliminary budget: Summary

Group	Description per function	Prelim 2017			Prelim 2018			Prelim 2019		
		aMDD	ISM	Total aMDD + ISM	aMDD	ISM	Total aMDD + ISM	aMDD	ISM	Total aMDD + ISM
<b>PDMS</b>	<b>Subtotal</b>	<b>12,018</b>	<b>155</b>	<b>12,173</b>	<b>10,323</b>	<b>-</b>	<b>10,323</b>	<b>4,245</b>	<b>-</b>	<b>4,245</b>
<b>D5Sc</b>	<b>Subtotal</b>	<b>2,520</b>	<b>225</b>	<b>2,746</b>	<b>1,336</b>	<b>-</b>	<b>1,336</b>	<b>3,834</b>	<b>186</b>	<b>4,020</b>
Clinical	aMDI 42847922EDI1008 C-14 ADME (AM) Study	910			2					
Clinical	aMDI 42847922EDI1014 SD Elderly PK Study	1,235			-					
Clinical	aMDI 42847922MDD1003 Oral Contraceptives DDI	371			808					
Clinical	aMDI 42847922MDD1004 Relative BA & Food Effect S	775			1,051					
Clinical	aMDI 42847922MDD1005 Driving Study in Healthy Volunteers				1,293			1,170		
Clinical	aMDI 42847922MDD1006 Driving Study in Elderly HV				1,293			1,170		
Clinical	aMDI 42847922MDD1007 Thorough QT Study	1,312			1,342					
Clinical	aMDI 42847922MDD1008 Abuse Liability Study				823					
Clinical	aMDI 42847922MDD2001 2-stage Phase 2B Study of A	8,150			15,359			1,744		
Clinical	aMDI 42847922EDI1015 Fluvoxamine DDI Study (Placeholder)				181					
Clinical	aMDI 42847922MDD2002 Phase 2B H2H Differentiat	4,668			8,677			3,964		
Clinical	aMDI Study in Patients with Renal Impairment				-			64		
Clinical	aMDI Study in Patients with Hepatic Impairment				-			78		
Clinical	aMDI Ph III MDD Long-Term Safety/Efficacy #2				2,450			8,050		
Clinical	aMDI Ph III Pivotal Dose Confirmation Study #1				175			7,700		
Clinical	aMDI Ph III Relapse Prevention Study				175			7,700		
Clinical	aMDI Ph III Pivotal Dose Confirmation Study #2				175			10,850		
Clinical	aMDI Ph III MDD Long-Term Safety/Efficacy #1				3,150			9,450		
Clinical	ISM 42847922ISM2005 Ph IIB Dose-Range Differentiation Study		2,819			23,598			6,456	
Clinical	ISM Ph III Pivotal Dose Confirmation Study #1					-			3,579	
Clinical	ISM Ph III Pivotal Dose Confirmation Study #2					-			3,579	
Clinical	ISM Ph III Parallel Group Differentiation Trial #1					-			1,465	
Clinical	ISM Ph III Parallel Group Differentiation Trial #2					-			525	
Clinical	aMDI General Clinical	1,768			700			700		
Clinical	ISM General Clinical		333			-			350	
<b>Clinical</b>	<b>Subtotal</b>	<b>19,188</b>	<b>3,152</b>	<b>22,340</b>	<b>37,664</b>	<b>23,598</b>	<b>61,262</b>	<b>52,140</b>	<b>15,954</b>	<b>68,094</b>
<b>Other general support</b>		<b>2,545</b>	<b>525</b>	<b>3,070</b>	<b>5,950</b>	<b>1,050</b>	<b>7,000</b>	<b>7,000</b>	<b>1,400</b>	<b>8,400</b>
<b>Total Orexin 2 Spend (ex BU)</b>		<b>36,271</b>	<b>4,057</b>	<b>40,328</b>	<b>55,262</b>	<b>24,648</b>	<b>79,910</b>	<b>67,219</b>	<b>17,540</b>	<b>84,759</b>



Janssen Research & Development  
Neuroscience TA

# Preliminary budget: OOP

Group	Indication	Description per function	Prelim 2017			Prelim 2018			Prelim 2019		
			aMDD	ISM	TOTAL aMDD + ISM	aMDD	ISM	TOTAL aMDD + ISM	aMDD	ISM	TOTAL aMDD + ISM
<b>PDMS</b>			<b>4,211</b>	-	<b>4,211</b>	<b>3,323</b>	-	<b>3,323</b>	<b>745</b>		<b>745</b>
<b>DSSc</b>			<b>1,867</b>	<b>114</b>	<b>1,981</b>	<b>1,196</b>	-	<b>1,196</b>	<b>3,484</b>	<b>186</b>	<b>3,670</b>
Clinical	aMDD	42847922EDI1008 C-14 ADME (AM) Study	598			2					
Clinical	aMDD	42847922EDI1014 SD Elderly PK Study	759			-					
Clinical	aMDD	42847922MDD1003 Oral Contraceptives DDI	196			458					
Clinical	aMDD	42847922MDD1004 Relative BA & Food Effect Study	443			701					
Clinical	aMDD	42847922MDD1005 Driving Study in Healthy Volunteers				593		470			
Clinical	aMDD	42847922MDD1006 Driving Study in Elderly HV				593		470			
Clinical	aMDD	42847922MDD1007 Thorough QT Study	689			992					
Clinical	aMDD	42847922MDD1008 Abuse Liability Study				123					
Clinical	aMDD	42847922MDD2001 2-stage Phase 2B Study of Adj. Treatment	7,379			13,609		1,044			
Clinical	aMDD	42847922EDI1015 Fluvoxamine DDI Study (Placeholder)				181					
Clinical	aMDD	42847922MDD2002 Phase 2B H2H Differentiation Study vs Qu	3,736			7,977		3,114			
Clinical	aMDD	Study in Patients with Renal Impairment						64			
Clinical	aMDD	Study in Patients with Hepatic Impairment						78			
Clinical	ISM	42847922ISM2005 Ph IIB Dose-Range Differentiation Study		2,497			21,848			5,756	
Clinical	ISM	Ph III Pivotal Dose Confirmation Study #1								2,879	
Clinical	ISM	Ph III Pivotal Dose Confirmation Study #2								2,879	
Clinical	ISM	Ph III Parallel Group Differentiation Trial #1								940	
<b>Clinical</b>			<b>13,800</b>	<b>2,497</b>	<b>16,297</b>	<b>25,229</b>	<b>21,848</b>	<b>47,077</b>	<b>5,240</b>	<b>12,454</b>	<b>17,694</b>
<b>Other</b>											
<b>TOTAL Orexin 2 Lead Program Spend Incl OOP \$</b>			<b>19,878</b>	<b>2,611</b>	<b>22,489</b>	<b>29,747</b>	<b>21,848</b>	<b>51,595</b>	<b>9,469</b>	<b>12,640</b>	<b>22,109</b>



Janssen Research & Development  
Neuroscience TA

# Preliminary budget: FTE \$

Group	Indication	Prelim 2017			Prelim 2018			Prelim 2019		
		aMDD	ISM	TOTAL aMDD + ISM	aMDD	ISM	TOTAL aMDD + ISM	aMDD	ISM	TOTAL aMDD + ISM
<b>PDMS</b>		<b>7,807</b>	<b>155</b>	<b>7,962</b>	<b>7,000</b>	<b>-</b>	<b>7,000</b>	<b>3,500</b>	<b>-</b>	<b>3,500</b>
<b>D5Sc</b>		<b>654</b>	<b>111</b>	<b>765</b>	<b>140</b>	<b>-</b>	<b>140</b>	<b>350</b>	<b>-</b>	<b>350</b>
Clinical	aMDD 42847922EDI1008 C-14 A0ME (AM) Study	312	-	-	-	-	-	-	-	-
Clinical	aMDD 42847922EDI1014 SD Elderly PK Study	476	-	-	-	-	-	-	-	-
Clinical	aMDD 42847922MDD1003 Oral Contraceptives DD	175	-	-	350	-	-	-	-	-
Clinical	aMDD 42847922MDD1004 Relative BA & Food Effect Study	333	-	-	350	-	-	-	-	-
Clinical	aMDD 42847922MDD1006 Driving Study in Elderly HV	-	-	-	700	-	-	700	-	-
Clinical	aMDD 42847922MDD1005 Driving Study in Healthy Volunteers	-	-	-	700	-	-	700	-	-
Clinical	aMDD 42847922MDD1007 Thorough QT Study	623	-	-	350	-	-	-	-	-
Clinical	aMDD 42847922MDD1008 Abuse Liability Study	-	-	-	700	-	-	-	-	-
Clinical	aMDD 42847922MDD2001 2-stage Phase 2B Study of Adj. Treatment i	771	-	-	1,750	-	-	700	-	-
Clinical	aMDD 42847922MDD2002 Phase 2B H2H Differentiation Study vs Out	933	-	-	700	-	-	350	-	-
Clinical	aMDD Ph III MDD Long-Term Safety/Efficacy #2	-	-	-	2,450	-	-	8,050	-	-
Clinical	aMDD Ph III Pivotal Dose Confirmation Study #1	-	-	-	175	-	-	7,700	-	-
Clinical	aMDD Ph III Relapse Prevention Study	-	-	-	175	-	-	7,700	-	-
Clinical	aMDD Ph III Pivotal Dose Confirmation Study #2	-	-	-	175	-	-	10,850	-	-
Clinical	aMDD Ph III MDD Long-Term Safety/Efficacy #1	-	-	-	3,150	-	-	9,450	-	-
Clinical	ISM 42847922SMQ005 Ph IIB Dose-Range Differentiation Study	-	322	-	-	1,750	-	-	700	-
Clinical	ISM Ph III Pivotal Dose Confirmation Study #1	-	-	-	-	-	-	-	700	-
Clinical	ISM Ph III Pivotal Dose Confirmation Study #2	-	-	-	-	-	-	-	700	-
Clinical	ISM Ph III Parallel Group Differentiation Trial #2	-	-	-	-	-	-	-	525	-
Clinical	ISM Ph III Parallel Group Differentiation Trial #1	-	-	-	-	-	-	-	525	-
Clinical	aMDD General Clinical support	1,768	-	-	700	-	-	700	-	-
Clinical	ISM General Clinical support	-	333	-	-	-	-	-	350	-
<b>Clinical</b>		<b>5,389</b>	<b>655</b>	<b>6,043</b>	<b>12,425</b>	<b>1,750</b>	<b>14,175</b>	<b>46,900</b>	<b>3,500</b>	<b>50,400</b>
<b>Other general support</b>		<b>2,545</b>	<b>525</b>	<b>3,070</b>	<b>5,950</b>	<b>1,050</b>	<b>7,000</b>	<b>7,000</b>	<b>1,400</b>	<b>8,400</b>
<b>TOTAL Orexin 2 Lead Program Spend InJ FTE #</b>		<b>16,394</b>	<b>1,446</b>	<b>17,839</b>	<b>25,515</b>	<b>2,800</b>	<b>28,315</b>	<b>57,750</b>	<b>4,900</b>	<b>62,650</b>

# Preliminary budget: FTE #

Group	Indication	Prelim 2017			Prelim 2018			Prelim 2019		
		aMDD	ISM	TOTAL aMDD + ISM	aMDD	ISM	TOTAL aMDD + ISM	aMDD	ISM	TOTAL aMDD + ISM
<b>PdMS</b>		<b>22</b>	<b>0</b>	<b>23</b>	<b>20</b>	<b>-</b>	<b>20</b>	<b>10</b>	<b>0</b>	<b>10</b>
<b>DSSc</b>		<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>1</b>	<b>-</b>	<b>1</b>
Clinical	aMDD 42847922EDI1008 C-14 ADME (AM) Study	1						-		
Clinical	aMDD 42847922EDI1014 SD Elderly PK Study	1						-		
Clinical	aMDD 42847922MDD1003 Oral Contraceptives DDI	1			1					
Clinical	aMDD 42847922MDD1004 Relative BA & Food Effect Study	1			1					
Clinical	aMDD 42847922MDD1006 Driving Study in Elderly HV				2			2		
Clinical	aMDD 42847922MDD1005 Driving Study in Healthy Volunteers				2			2		
Clinical	aMDD 42847922MDD1007 Thorough QT Study	2			1					
Clinical	aMDD 42847922MDD1008 Abuse Liability Study				2					
Clinical	aMDD 42847922MDD2001 2-stage Phase 2B Study of Adj. Treatm	2			5			2		
Clinical	aMDD 42847922MDD2002 Phase 2B H2H Differentiation Study vs	3			2			1		
Clinical	aMDD Ph III MDD Long-Term Safety/Efficacy #2				7			23		
Clinical	aMDD Ph III Pivotal Dose Confirmation Study #1				1			22		
Clinical	aMDD Ph III Relapse Prevention Study				1			22		
Clinical	aMDD Ph III Pivotal Dose Confirmation Study #2				1			31		
Clinical	aMDD Ph III MDD Long-Term Safety/Efficacy #1				9			27		
Clinical	ISM 42847922ISM2005 Ph IIB Dose-Range Differentiation Study		1			5				2
Clinical	ISM Ph III Pivotal Dose Confirmation Study #1									2
Clinical	ISM Ph III Pivotal Dose Confirmation Study #2									2
Clinical	ISM Ph III Parallel Group Differentiation Trial #2									2
Clinical	ISM Ph III Parallel Group Differentiation Trial #1									2
Clinical	aMDD General Clinical support	5			2			2		
Clinical	ISM General Clinical support		1						1	
<b>Clinical</b>		<b>15</b>	<b>2</b>	<b>17</b>	<b>36</b>	<b>5</b>	<b>41</b>	<b>134</b>	<b>10</b>	<b>144</b>
Other	aMDD Other Project Support	7			17			20		
Other	ISM Other Project Support		2			3			4	
<b>Other general support</b>		<b>7</b>	<b>2</b>	<b>9</b>	<b>17</b>	<b>3</b>	<b>20</b>	<b>20</b>	<b>4</b>	<b>24</b>
<b>TOTAL Orexin 2 Lead Program Spend JNJ FTE #</b>		<b>47</b>	<b>4</b>	<b>51</b>	<b>73</b>	<b>8</b>	<b>81</b>	<b>165</b>	<b>14</b>	<b>179</b>



PHARMACEUTICAL COMPANIES  
OF **Johnson & Johnson**



Janssen Research & Development  
Neuroscience TA

## STOCK REPURCHASE AGREEMENT

This Stock Repurchase Agreement (this “**Agreement**”) is made and entered into as of June 13, 2017, by and among Minerva Neurosciences, Inc., a Delaware corporation (the “**Company**”), and Johnson & Johnson Innovation – JJDC, Inc. (f/k/a Johnson & Johnson Development Corporation), a New Jersey corporation (the “**Seller**”).

### RECITAL

WHEREAS, the Company and Janssen Pharmaceutica N.V., an affiliate of the Seller (“**Janssen**”), are entering into an amendment to that certain Co-Development and License Agreement by and between the Company and Janssen dated as of February 13, 2014 (the “**Amendment**”); and

WHEREAS, in connection with the Amendment, the Seller desires to sell to the Company an aggregate of 3,892,256 shares (the “**Repurchase Shares**”) of the Company’s common stock, par value \$0.0001 per share, and the Company has agreed to purchase the Repurchase Shares from the Seller, for a purchase price per share of \$0.0001, or \$389.23 in the aggregate (the “**Purchase Price**”), subject to the conditions set forth in this Agreement (the “**Repurchase Transaction**”).

### AGREEMENT

NOW, THEREFORE, intending to be legally bound, and in consideration of the premises and the mutual representations, warranties, covenants, and agreements in this Agreement, the parties agree as follows:

1. Purchase and Sale of Repurchase Shares. Upon the terms and subject to the conditions contained in this Agreement, the Company hereby agrees to purchase from the Seller, and the Seller hereby agrees to sell, assign, transfer and convey to the Company, the Repurchase Shares, and all rights associated therewith, free and clear of any Encumbrance (as defined below) (other than, for the avoidance of doubt, any Encumbrance created by the Company or in respect of obligations of the Company), for the Purchase Price.

2. The Closing. The closing of the sale and purchase of the Repurchase Shares (the “**Closing**”) shall take place at the offices of the Company, on the third business day following the satisfaction of all closing conditions set forth in Sections 6 and 7 hereof, or at such other time and place as may be agreed upon by the Company and the Seller (the date of Closing, the “**Closing Date**”).

3. Delivery of Repurchase Shares; Payment of Purchase Price. At the Closing, (a) the Seller shall deliver to the Company an instrument of transfer for the Repurchase Shares in a form acceptable to Computershare Trust Company, N.A., the Company’s transfer agent, and (b) the Company shall pay the Purchase Price to the Seller by wire transfer of immediately available funds to the account specified by the Seller to the Company.



---

4. Representations and Warranties of Seller. The Seller hereby represents and warrants to the Company that:

a. The execution, delivery, and performance of this Agreement have been duly authorized by the necessary corporate action of the Seller, and this Agreement has been duly executed and delivered by the Seller and constitutes a valid and legally binding obligation of the Seller, enforceable against the Seller in accordance with its terms except as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

b. The Seller is the record and beneficial owner of the Repurchase Shares, free and clear of any liens, encumbrances, restrictions on transfer, taxes, charges, security interests, options, warrants, purchase rights, contracts, commitments, equities, claims, restrictions, and demands, whether voluntarily incurred or arising by operation of law, including without limitation any agreement to give any of the foregoing in the future (“*Encumbrance*”). Except for this Agreement and the commitments made by affiliates of the Seller to the European Commission in connection with the Pending Acquisition (as defined below), the Seller is not a party to any option, warrant, purchase right, or other contract or commitment that could require the Seller to sell, transfer, assign or otherwise dispose of, or create any Encumbrance with respect to, the Repurchase Shares.

c. The sale and delivery of the Repurchase Shares to the Company pursuant to this Agreement will vest in the Company good and marketable title to the Repurchase Shares, free and clear of any Encumbrances.

d. The execution and delivery of this Agreement by the Seller and the performance by the Seller of the transactions contemplated hereby do not (i) violate any provision of any law applicable to the Seller or the transactions contemplated hereby, or (ii) result in a breach of, cause a default under (with or without notice, or lapse of time, or both), conflict with, or result in a termination of any agreement, contract or arrangement to which the Seller is a party or by which its assets are bound.

e. The Seller has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the Repurchase Transaction. The Seller has had the opportunity to ask questions and receive answers concerning the terms and conditions of the Repurchase Transaction and the Repurchase Shares and has had full access to such other information concerning the Repurchase Shares and the Company as it has requested. The Seller has received all information that it believes is necessary or appropriate in connection with the Repurchase Transaction.

The Seller is an informed and sophisticated party and has engaged, to the extent the Seller deems appropriate, expert advisors experienced in the evaluation of transactions of the type contemplated hereby. The Seller acknowledges that it has not relied upon any express or implied representations or warranties of any nature made by or on behalf of the Company, whether or not any such representations, warranties or statements were made in writing or orally, except as expressly set forth for the benefit of the Seller in this Agreement.

f. The Seller acknowledges and understands that the Company and its officers and affiliates may possess material non-public information not known to the Seller that may impact the value of the Repurchase Shares (the “*Non-Public Information*”) that the Company is unable to disclose to the Seller, including without limitation, (i) information received by principals and employees of the Company in their capacities as directors, officers, significant stockholders and/or affiliates of the Company, (ii) information otherwise received from the Company on a confidential

basis, and (iii) information received on a privileged basis from the attorneys and financial advisers representing the Company and its Board of Directors. The Seller understands, based on its experience, the disadvantage to which the Seller is subject due to the disparity of information between the Seller and the Company. Notwithstanding this, the Seller has deemed it appropriate to engage in the Repurchase Transaction. The Seller hereby waives any claim, or potential claim, it has or may have against the Company, including, but not limited to, its respective officers, managers, members, successors and assigns, relating to such person's or entity's possession and nondisclosure to the Seller of Non-Public Information that has not been requested by the Seller in connection with the entry into this Agreement.

5. Representations and Warranties of the Company. The Company represents and warrants to the Seller that:

a. The Company is a corporation duly formed, validly existing and in good standing under the laws of the State of Delaware.

b. The execution, delivery, and performance of this Agreement have been duly authorized by the necessary corporate action of the Company, and this Agreement has been duly executed and delivered on behalf of the Company and constitutes a valid and legally binding obligation of the Company, enforceable against the Company in accordance with its terms except as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

c. The execution and delivery of this Agreement by the Company and the performance by the Company of the transactions contemplated hereby do not (i) violate any provision of the governing documents of the Company, (ii) violate any provision of any law applicable to the Company or the transactions contemplated hereby, or (iii) result in a breach of, cause a default under (with or without notice, or lapse of time, or both), conflict with, or result in a termination of any agreement, contract or arrangement to which the Company is a party or by which its assets are bound.

d. Except for the representations and warranties made by the Company in this Section 5, neither the Company nor any other person makes any representation or warranty with respect to the Company or its subsidiaries or their respective business, operations, assets, liabilities, condition (financial or otherwise) or prospects, notwithstanding the delivery or disclosure to the Seller or their representatives of any documentation, forecasts, projections, estimates, budgets or other information with respect to any one or more of the foregoing. Except for the representations and warranties contained in this Section 5, the Company hereby disclaims all liability and responsibility for any representation, warranty, projection, forecast, statement, or information made, communicated, or furnished (orally or in writing) to the Seller (including any opinion, information, projection, or advice that may have been or may be provided to the Seller by any manager, officer, employee, agent, consultant, or representative of the Company).

e. The Company is relying on the representations and warranties of the Seller in Section 4 for all purposes.

6. Conditions to the Seller's Obligations at Closing. The obligation of the Seller to sell the Repurchase Shares at the Closing is subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

---

a. The settlement of the public tender offer (the “**Pending Acquisition**”) by Janssen Holding GmbH, a Swiss corporation and an affiliate of the Seller (“**Janssen Holding**”), for all publicly held registered shares of Actelion Ltd, a Swiss corporation, shall have occurred or, the acquisition of Actelion Ltd or substantially all of the outstanding equity or assets of Actelion Ltd by Janssen Holding, Seller or any affiliate of either of the foregoing shall have occurred by means of any alternative structure.

b. The representations and warranties of the Company contained in Section 5 shall be true and correct in all respects as of the Closing.

c. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by the Company on or before the Closing.

d. Johnson & Johnson, an affiliate of the Seller, shall have received confirmation from the European Commission in writing that it either: (a) approves the terms of this Agreement and the amendment; or (b) does not object to the terms of this Agreement and the Amendment.

7. Conditions to the Company’s Obligations at Closing. The obligations of the Company to purchase the Repurchase Shares at the Closing is subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

a. The representations and warranties of the Seller contained in Section 4 shall be true and correct in all respects as of the Closing.

b. The Seller shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by the Seller on or before the Closing.

8. Public Announcements. No written publication, news release or other written public announcement relating to this Agreement, or to the execution or effectiveness hereof or performance hereunder, shall be made without the other parties’ written consent. Notwithstanding the foregoing, any disclosure which is required by stock exchange regulation or by applicable law as advised by the disclosing party’s counsel may be made without the prior consent of the other parties, provided that the other parties shall be given prompt notice of any such legally required written disclosure and the disclosing party, to the extent reasonably practicable, shall provide the other parties an opportunity to comment on the proposed written disclosure prior to its disclosure or release.

9. Specific Performance. The parties agree that irreparable damage would occur in the event that any of the provisions of this Agreement and the transactions contemplated hereby were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that, without the necessity of posting bond or other undertaking, the parties shall be entitled to specific performance of the terms hereof, this being in addition to any other remedies to which they are entitled at law or equity, and in the event that any action or suit is brought in equity to enforce the provisions of this Agreement, no party will allege, and each party hereby waives the defense or counterclaim, that there is an adequate remedy at law.

10. Termination. This Agreement shall automatically terminate, without any further action on the part of the Company or the Seller, if the Closing does not occur on or prior to August 31, 2017, unless the parties mutually agree to a later date. Further, this Agreement may be terminated upon prior written notice by the Seller to the Company if the Pending Acquisition is abandoned by Janssen Holding. In the event of the termination of this Agreement, neither the Company nor the Seller shall have any liability or obligation to the other under or in respect of this Agreement, except to the extent of any fraud or intentional or willful breach of this Agreement. In the event of any such termination, this Agreement shall become void and have no effect, and the transactions contemplated hereby shall be abandoned without further action by the parties hereto except that the provisions of Section 8 and Sections 10 through 19 shall survive the termination of this Agreement.

11. Further Action. Each party hereto agrees to execute any additional documents and to take any further action as may be necessary or desirable in order to implement the transactions contemplated by this Agreement.

12. Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when delivered personally, mailed by certified or registered mail, return receipt requested and postage prepaid, or sent via a nationally recognized overnight courier, or sent via facsimile or electronic mail to the recipient. Such notices, demands and other communications shall be sent to the address indicated below:

To the Company:

Minerva Neurosciences, Inc.  
1601 Trapleo Road, Suite 284  
Waltham, MA 02451  
Attention: Chief Executive Officer

To the Seller:

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, New Jersey 08933  
United States of America  
Fax: +1 732 524-5304  
Attention: General Counsel

13. Expenses. All costs and expenses incurred in connection with this Agreement will be paid by the party incurring such cost or expense.

14. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties and their successors in interest. Neither party may assign this Agreement without the prior written consent of the other.

15. Governing Law. This Agreement will be governed in all respects, including validity, interpretation, and effect, by the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws.

---

16. Jurisdiction. Each of the parties hereby consents to the exclusive jurisdiction of the state and federal courts sitting in Delaware in any action on a claim arising out of, under or in connection with this Agreement or the transactions contemplated by this Agreement.

17. Waiver of Jury Trial. Each of the parties to this Agreement acknowledges and agrees that any controversy arising under this Agreement is likely to involve complicated and difficult issues. As a result, each party to this Agreement irrevocably and unconditionally waives any right that such party may have to a trial by jury in respect to litigation arising out of this Agreement or the transactions contemplated hereby. Each party to this Agreement understands and has considered the implications of this waiver and makes this waiver voluntarily.

18. Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, shall be deemed to constitute one and the same Agreement. The exchange of copies of this Agreement and of signature pages by facsimile or electronic transmission shall constitute effective execution and delivery of this Agreement as to the parties and may be used in lieu of the original Agreement for all purposes.

19. Entire Agreement. This Agreement and the Amendment constitute the entire agreement of the parties with respect to the matters set forth herein and supersede any prior or contemporaneous understandings, agreements or representations by or between the parties, written or oral, that may have related in any way to the subject matter hereof. This Agreement may be amended or modified, and any provision of this Agreement may be waived, only by a writing signed by each of the parties.

*[Signature Page Follows]*

---

IN WITNESS WHEREOF, the parties have executed this Agreement upon the date written above.

MINERVA NEUROSCIENCES, INC.

By: /s/ Remy Luthringer

Name: Remy Luthringer, Ph.D.

Title: President and CEO

JOHNSON & JOHNSON INNOVATION – JJDC, INC.

By: /s/ Tom Heyman

Name: Tom Heyman

Title: President

*Signature Page to Stock Repurchase Agreement*