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

**FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Minerva Neurosciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

26-0784194
(I.R.S. Employer
Identification Number)

1500 District Avenue
Burlington, MA 01803
(617) 600-7373

(Address, including zip code, and telephone number, including area code of registrant's principal executive offices)

Remy Luthringer
Chief Executive Officer
1500 District Avenue
Burlington, MA 01803
(617) 600-7373

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
Marc Recht
Ryan Sansom
Cooley LLP
500 Boylston Street, 14th Floor
Boston, MA 02116
(617) 937-2300

**From time to time after the effective date of this Registration Statement
(Approximate date of commencement of proposed sale to the public)**

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

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 7(a)(2)(B) of the Securities Act.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said section 8(a), may determine.

[Table of Contents](#)

The information in this prospectus is not complete and may be changed. The Selling Stockholders may not sell these securities or accept an offer to buy these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting offers to buy these securities in any jurisdiction where such offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 4, 2023

PROSPECTUS



**Up to 2,000,575 Shares of Common Stock
Offered by the Selling Stockholders**

This prospectus relates to the resale from time to time of up to 2,000,575 shares of common stock, par value \$0.0001 per share, of Minerva Neurosciences, Inc. (the "Common Stock") by the selling stockholders listed on page 9 (the "Selling Stockholders"), including their pledgees, assignees, donees, transferees or their respective successors-in-interest, which consist of 1,425,000 outstanding shares of our Common Stock held by the Selling Stockholders and 575,575 shares of our Common Stock issuable upon the exercise of outstanding pre-funded warrants to purchase shares of our Common Stock held by the Selling Stockholders. We will not receive any proceeds from the sale of the shares offered by this prospectus, except the exercise price of \$0.01 per share of any of the pre-funded warrants exercised for cash.

We have agreed, pursuant to a securities purchase agreement that we have entered into with the Selling Stockholders, to bear all of the expenses incurred in connection with the registration of these shares. The Selling Stockholders will pay or assume discounts, commissions, fees of underwriters, selling brokers or dealer managers and similar expenses, if any, incurred for the sale of these shares of our Common Stock.

The Selling Stockholders identified in this prospectus, or their pledgees, assignees, donees, transferees or their respective successors-in-interest, may offer the shares from time to time on terms to be determined at the time of sale through ordinary brokerage transactions or through any other means described in this prospectus under the caption "Plan of Distribution." The shares may be sold at fixed prices, at prevailing market prices, at prices related to prevailing market prices or at negotiated prices. For a list of the Selling Stockholders, see the section entitled "Selling Stockholders" on page 9.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus, any amendments or supplements and the information incorporated by reference in this prospectus and any applicable amendment or prospectus supplement carefully before you make your investment decision.

Our Common Stock is traded on The Nasdaq Capital Market under the symbol "NERV." On August 3, 2023, the last reported sale price of our Common Stock was \$10.11 per share. You are urged to obtain current market quotations for our Common Stock.

Investing in our Common Stock involves a high degree of risk. You should carefully read and consider the section entitled "[Risk Factors](#)" on page 7 and the risk factors included in our periodic reports filed with the Securities and Exchange Commission, in any applicable prospectus supplement and in any other documents we file with the SEC.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2023.

TABLE OF CONTENTS

	<u>Page</u>
ABOUT THIS PROSPECTUS	1
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	2
PROSPECTUS SUMMARY	3
THE OFFERING	6
RISK FACTORS	7
USE OF PROCEEDS	8
SELLING STOCKHOLDERS	9
PLAN OF DISTRIBUTION	12
LEGAL MATTERS	14
EXPERTS	14
WHERE YOU CAN FIND MORE INFORMATION	14
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	14

ABOUT THIS PROSPECTUS

We urge you to read carefully this prospectus, together with the information incorporated herein by reference as described under the heading “Where You Can Find More Information,” before buying any of the securities being offered.

You should rely only on the information contained or incorporated by reference in this prospectus and any applicable prospectus supplement or in any amendment to this prospectus. Neither we nor the Selling Stockholders have authorized anyone to provide you with different information, and if anyone provides, or has provided you, with different or inconsistent information, you should not rely on it. The Selling Stockholders may offer to sell, and may solicit offers to buy, shares of our Common Stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus, as well as the information filed previously with the Securities and Exchange Commission (the “SEC”), and incorporated herein by reference, is accurate only as of the date of the document containing the information, regardless of the time of delivery of this prospectus or any applicable prospectus supplement or any sale of our Common Stock.

A prospectus supplement may add to, update or change the information contained in this prospectus. You should read both this prospectus and any applicable prospectus supplement together with additional information described below under the heading “Where You Can Find More Information.”

In this prospectus, references to “Minerva Neurosciences,” “Minerva,” the “Company,” the “registrant,” “we,” “us,” and “our” refer to Minerva Neurosciences, Inc. and its subsidiaries. The phrase “this prospectus” refers to this prospectus and any applicable prospectus supplement, unless the context requires otherwise.

When we refer to the Selling Stockholders in this prospectus, we are referring to the persons names as the Selling Stockholders in this prospectus and, as applicable, any donees, pledgees, assignees, transferees or other successors-in-interest selling the shares received after the date of this prospectus from the Selling Stockholders as a gift, pledge, or other non-sale related transfer.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the information incorporated by reference in this prospectus and any prospectus supplement contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the Private Securities Litigation Reform Act of 1995, as amended, that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including, but not limited to, statements regarding the clinical development of roluperidone for the treatment of negative symptoms of schizophrenia; the potential benefits of roluperidone for the treatment of negative symptoms of schizophrenia or any other indication; the adequacy and efficacy of our clinical trials and studies with roluperidone, and the sufficiency of the data from such trials and studies to support marketing application; our interpretation of the feedback from the U.S. Food and Drug Administration (the “FDA”); the timing and outcomes of future interactions with U.S. and foreign regulatory bodies, including the FDA; our expectations regarding the potential market size and size of the potential patient populations for roluperidone, if approved; the timing and likelihood of success, plans and objectives of management for future operations; and our expected future financing needs. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this prospectus are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus or the documents incorporated by reference in this prospectus, as applicable, and are subject to a number of risks, uncertainties and assumptions described under the sections in this prospectus and the documents incorporated by reference herein entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this prospectus and the documents incorporated by reference herein. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we undertake no obligation to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus. See the section titled “Where You Can Find More Information.”

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based on information available to us as of the date of this prospectus, and while we believe such information provides a reasonable basis for these statements, such information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely on these statements.

PROSPECTUS SUMMARY

The following summary highlights selected information contained or incorporated by reference elsewhere in this prospectus and does not contain all of the information that you need to consider in making your investment decision. Before investing in our securities, you should carefully read this entire prospectus, any applicable prospectus supplement and any related free writing prospectus, including the information under the caption “Risk Factors” contained in this prospectus (as supplemented and amended) and under similar headings in the documents that are incorporated by reference into this prospectus. You should also carefully read the other information incorporated by reference into this prospectus, including our financial statements and the related notes, and the exhibits to the registration statement of which this prospectus is a part.

Company Overview

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of proprietary product candidates to treat patients suffering from central nervous system diseases. Leveraging our scientific insights and clinical experience, we have acquired or in-licensed compounds that we believe have innovative mechanisms of actions and therapeutic profiles that potentially address the unmet needs of patients with these diseases.

Our primary product candidate, roluperidone (f/k/a MIN-101), is being developed for the treatment of negative symptoms in patients with schizophrenia. Roluperidone is a compound that has been shown to block serotonin, sigma, and α -adrenergic receptors that are involved in the regulation of mood, cognition, sleep and anxiety. It has been designed to block a specific subtype of serotonin receptor called 5-HT_{2A}. When 5-HT_{2A} is blocked, certain symptoms of schizophrenia, such as hallucinations, delusions, agitation and thought and movement disorders, as well as the side effects associated with antipsychotic treatments, can be minimized. Additionally, blocking 5-HT_{2A} promotes slow wave sleep, a sleep stage often disrupted in patients with schizophrenia. Roluperidone has also been designed to block a specific subtype of sigma receptor called sigma₂, which is involved in movement control, psychotic symptom control and learning and memory. Blocking sigma₂, along with blocking the α -adrenergic subtypes α 1A, and to a lesser extent α 1B, also increases calcium levels in neurons in the brain, which can improve memory. Pre-clinical findings provide evidence of the effect of roluperidone on Brain-Derived Neurotrophic Factor, which has been associated with neurogenesis, neuroplasticity, neuroprotection, synapse regulation, learning and memory.

We believe the scientifically supported and innovative mechanisms of action of roluperidone may potentially address the unmet needs of schizophrenic patients, which include treatment of negative symptoms and cognitive impairment, without the side effects of existing therapies. Negative symptoms are lifelong debilitating symptoms and include: asociality, or the lack of motivation to engage in social interactions; anhedonia, or the inability to experience positive emotions; alogia, or failure to engage in normal conversation; avolition, or loss of energy and interest in activities; and blunted affect, or diminished emotional expression. We believe that roluperidone, if approved, could treat the majority of patients diagnosed with schizophrenia. An estimated 69% of patients diagnosed with schizophrenia have negative symptoms, with at least 42% of patients diagnosed with schizophrenia having prominent negative symptoms.

In August 2022, we submitted a New Drug Application (“NDA”) with the U.S. Food and Drug Administration (“FDA”) for our lead product candidate, roluperidone, for the treatment of negative symptoms in schizophrenia. The FDA initially notified us that they would not accept the file for review, issuing a refusal to file letter (“RTF”) in October 2022. Subsequently, we requested a formal dispute resolution and appealed the RTF, following which, on April 27, 2023, the FDA filed our NDA for roluperidone. In May 2023, the FDA confirmed that the NDA for roluperidone was assigned a standard review classification and a Prescription Drug User Fee Act goal date of February 26, 2024. The FDA advised that it identified potential review issues that had been previously cited in the RTF decision letter, which included those discussed at the Type C meeting in March 2022.

In addition, we have exclusive rights to develop and commercialize MIN-301, a compound for the treatment of Parkinson's disease. We previously co-developed seltorexant (f/k/a MIN-202 or JNJ-42847922) with Janssen Pharmaceutica NV, one of the Janssen Pharmaceutical Companies of Johnson & Johnson ("Janssen"), for the treatment of insomnia disorder and adjunctive treatment of Major Depressive Disorder. In June 2020, we exercised our right to opt out of our agreement with Janssen for the future Phase 3 development and commercialization of seltorexant. Under the terms of the opt-out agreement, we were entitled to collect royalties in the mid-single digits on potential future worldwide sales of seltorexant in certain indications, with no further financial obligations to Janssen. In January 2021, we sold our rights to these potential royalties to Royalty Pharma plc for a \$60 million cash payment and up to an additional \$95 million in potential milestone payments, subject to completion of Phase 3 trials by Janssen and regulatory approvals. Janssen is currently conducting two Phase 3 studies with seltorexant, a third Phase 3 study was discontinued during 2022.

Private Placement

On June 27, 2023, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with the purchasers named therein (the "Purchasers"), pursuant to which we agreed to sell and issue to the Purchasers in a private placement (the "Private Placement") (i) an aggregate of 1,425,000 shares of Common Stock, at a purchase price of \$10.00 per share, and (ii) in lieu of additional shares of Common Stock, pre-funded warrants (the "Pre-Funded Warrants") to purchase an aggregate of 575,575 shares of Common Stock at a purchase price of \$9.99 per Pre-Funded Warrant. On June 30, 2023, we closed the Private Placement and issued an aggregate of 1,425,000 shares of Common Stock and Pre-Funded Warrants to purchase an aggregate of 575,575 shares of Common Stock.

Each Pre-Funded Warrant has an exercise price equal to \$0.01 per share. The Pre-Funded Warrants are exercisable at any time after their original issuance and will not expire until exercised in full. The Pre-Funded Warrants provide that a holder of Pre-Funded Warrants will not have the right to exercise any portion of its Pre-Funded Warrants if such holder, together with its affiliates, would beneficially own in excess of 14.99% or 19.99%, as applicable, of the number of shares of Common Stock outstanding immediately after giving effect to such exercise (the "Beneficial Ownership Limitation"); *provided, however*, that each holder may increase or decrease the Beneficial Ownership Limitation by giving 61 days' notice to us, but not to any percentage below 4.99% or in excess of 19.99%.

The shares of Common Stock issued to the Purchasers, and the shares of Common Stock issuable upon the exercise of the Pre-Funded Warrants, were not initially registered under the Securities Act or any state securities laws. The Private Placement relied on the exemption from the registration requirements afforded by Regulation D under the Securities Act. In connection with their execution of the Purchase Agreement, each of the Purchasers represented to us that such Purchaser is an "accredited investor" as defined in Regulation D of the Securities Act and that the securities purchased by such Purchaser were being acquired solely for its own account and for investment purposes and not with a view to its future sale or distribution.

Under the terms of the Purchase Agreement, we agreed to prepare and file, within 45 days after the closing of the Private Placement, a registration statement with the SEC to register for resale the shares of our Common Stock issued under the Purchase Agreement and the shares of our Common Stock issuable upon exercise of the Pre-Funded Warrants issued under the Purchase Agreement.

Corporate Information

We were incorporated under the name Cyrenaic Pharmaceuticals, Inc. under the laws of the State of Delaware on April 23, 2007. In November 2013, we merged with Sonkei Pharmaceuticals, Inc. and the combined company was renamed Minerva Neurosciences, Inc.

[Table of Contents](#)

Our principal executive offices are located at 1500 District Avenue Burlington, Massachusetts 01803 and our phone number is (617) 600-7373. Our website address is www.minervaneurosciences.com. Our website and the information contained on, or that can be accessed through, our website will not be deemed to be incorporated by reference in, and are not considered part of, this prospectus.

THE OFFERING

Common Stock Offered by the Selling Stockholders	Up to 2,000,575 shares
Use of Proceeds	We will not receive any proceeds from the sale of the Common Stock covered by this prospectus, except with respect to amounts received by us due to the exercise of Pre-Funded Warrants.
Nasdaq Capital Market Symbol	NERV

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risks described in the documents incorporated by reference in this prospectus and any applicable prospectus supplement and any related free writing prospectus, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to the occurrence of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described under the heading “Risk Factors” in the documents incorporated herein by reference, including in (1) our most recent Annual Report on Form 10-K on file with the SEC, (2) our most recent Quarterly Report on Form 10-Q on file with the SEC and (3) any amendments thereto reflected in subsequent filings with the SEC, all of which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with a specific offering.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus forms a part to permit the holders of the shares of our Common Stock described in the section entitled “Selling Stockholders” to resell such shares. We are not selling any securities under this prospectus, and we will not receive any proceeds from the sale or other disposition of shares of our Common Stock held by the Selling Stockholders, except with respect to amounts received by us due to the exercise of the Pre-Funded Warrants.

Each Selling Stockholder will pay any underwriting discounts and commissions and expenses incurred by such Selling Stockholder for brokerage, accounting, tax or legal services or any other expenses incurred by such Selling Stockholder in disposing of its shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq Stock Market listing fees and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

This prospectus covers the sale or other disposition by the Selling Stockholders of up to the total number of shares of our Common Stock that were issued to the Selling Stockholders pursuant to the Purchase Agreement, plus the total number of shares of our Common Stock issuable upon exercise of the Pre-Funded Warrants issued to the Selling Stockholders pursuant to the Purchase Agreement, without giving effect to the Beneficial Ownership Limitation described under “Prospectus Summary—Private Placement—Securities Purchase Agreement.” The table below sets forth, to our knowledge, information concerning the beneficial ownership of shares of our Common Stock by the Selling Stockholders as of July 21, 2023. The information in the table below with respect to each Selling Stockholder has been obtained from the respective Selling Stockholder and the Selling Stockholders may have sold, transferred or otherwise disposed of all or a portion of their securities after the date on which they provided us with information regarding their securities. Throughout this prospectus, when we refer to the shares of our Common Stock being registered on behalf of the Selling Stockholders, we are referring to the shares of our Common Stock and the shares underlying the Pre-Funded Warrants issued to the Selling Stockholders pursuant to the Purchase Agreement, without giving effect to the Beneficial Ownership Limitation described above. The Selling Stockholders may sell all, some or none of the shares of Common Stock subject to this prospectus. See “Plan of Distribution” below as it may be supplemented and amended from time to time.

The number of shares of Common Stock beneficially owned prior to the offering for each Selling Stockholder includes all shares of our Common Stock beneficially held by such Selling Stockholder as of July 21, 2023, which includes (i) all shares of our Common Stock purchased by such Selling Stockholder in the Private Placement and (ii) all shares of Common Stock issuable upon exercise of the Pre-Funded Warrants purchased by such Selling Stockholder in the Private Placement, subject to the Beneficial Ownership Limitation described under “Prospectus Summary—Private Placement—Securities Purchase Agreement.”

Other than as stated above, beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our Common Stock. Generally, a person “beneficially owns” shares of our Common Stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days. In computing the number of shares of our Common Stock beneficially owned by a Selling Stockholder and the percentage ownership of such Selling Stockholder, we deemed outstanding shares of Common Stock issuable upon the exercise of pre-funded warrants (regardless of whether or not such pre-funded warrants were acquired in the Private Placement) and/or warrants, as applicable, held by that Selling Stockholder that are exercisable within 60 days of July 21, 2023. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other Selling Stockholder. The percentages of shares owned before and after the offering are based on 6,993,406 shares of Common Stock outstanding as of July 21, 2023, which includes the outstanding shares of Common Stock offered by this prospectus but does not include any shares of Common Stock offered by this prospectus that are issuable pursuant to the Pre-Funded Warrants and are deemed outstanding in the table below because they are beneficially owned by a Selling Stockholder. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for any Selling Stockholder named below.

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering		Number of Shares of Common Stock Being Offered ⁽¹⁾	Shares of Common Stock to be Beneficially Owned After Offering ⁽²⁾	
	Number	Percentage		Number	Percentage
Funds affiliated with Federated Hermes, Inc. ⁽³⁾	1,351,275	19.3%	500,350	1,201,275	16.4%
Boehringer Ingelheim International GmbH ⁽⁴⁾	1,428,708	19.99%	1,500,225	—	—

(1) The number of shares of our Common Stock in the column “Number of Shares of Common Stock Being Offered” represents all of the shares of our Common Stock that a Selling Stockholder may offer and sell from time to time under this prospectus.

[Table of Contents](#)

- (2) We do not know when or in what amounts a Selling Stockholder may offer shares for sale. The Selling Stockholders might not sell any or might sell all of the shares offered by this prospectus. Because the Selling Stockholders may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot estimate the number of the shares that will be held by the Selling Stockholders after completion of the offering. However, for purposes of this table, we have assumed no further acquisitions of shares of Common Stock (or securities exercisable or convertible into Common Stock) by the Selling Stockholders and that, after completion of the offering, none of the shares covered by this prospectus will be held by the Selling Stockholders, including Common Stock issuable upon exercise of the Pre-Funded Warrants issued in the Private Placement.
- (3) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 70,950, 75,000 and 4,050 shares of Common Stock purchased by Federated Hermes Kaufmann Small Cap Fund, a portfolio of Federated Hermes Equity Funds (“Federated Hermes Kaufmann Small Cap Fund”), Federated Hermes Kaufmann Fund, a portfolio of Federated Hermes Equity Funds (“Federated Hermes Kaufmann Fund”) and Federated Hermes Kaufmann Fund II, a portfolio of Federated Hermes Insurance Series (“Federated Hermes Kaufmann Fund II” and together with Federated Hermes Kaufmann Small Cap Fund and Federated Hermes Kaufmann Fund, the “Federated Hermes Kaufmann Funds”), respectively, in the Private Placement, (ii) 534,050 additional shares of Common Stock previously purchased by Federated Hermes Kaufmann Small Cap Fund, (iii) 650,000 additional shares of Common Stock previously purchased by Federated Hermes Kaufmann Fund, and (iv) 17,225 additional shares of Common Stock previously purchased by Federated Hermes Kaufmann Fund II. In addition to the foregoing shares, as of July 21, 2023, Federated Hermes Kaufmann Small Cap Fund, Federated Hermes Kaufmann Fund and Federated Hermes Kaufmann Fund II held pre-funded warrants purchased in the Private Placement to purchase an aggregate of 350,350 shares of Common Stock, which are not included in the shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” because they are subject to limitations on exercisability if such exercise would result in Federated Hermes Kaufmann Funds, in the aggregate, beneficially owning more than 14.99% of our outstanding Common Stock. The shares reported under “Number of Shares of Common Stock Being Offered” consist of the shares of Common Stock, including the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants, purchased by Federated Hermes Kaufmann Funds in the Private Placement, without giving effect to the Beneficial Ownership Limitation. The shares reported under “Number of Shares of Common Stock to be Beneficially Owned After Offering” consist of (i) 534,050 shares of Common Stock held by Federated Hermes Kaufmann Small Cap Fund, (ii) 650,000 shares of Common Stock held by Federated Hermes Kaufmann Fund and (iii) 17,225 shares of Common Stock held by Federated Hermes Kaufmann Fund II. The Federated Hermes Kaufmann Funds are managed by Federated Equity Management Company of Pennsylvania and subadvised by Federated Global Investment Management Corp., which are wholly-owned subsidiaries of FII Holdings, Inc., which is a wholly-owned subsidiary of Federated Hermes, Inc. (the “Federated Hermes Parent”). All of the Federated Hermes Parent’s outstanding voting stock is held in the Voting Shares Irrevocable Trust (the “Federated Trust”) for which Thomas R. Donahue, Ann C. Donahue and J. Christopher Donahue, who are collectively referred to as Federated Trustees, act as trustees. The Federated Hermes Parent’s subsidiaries have the power to direct the vote and disposition of the securities held by the Federated Hermes Kaufmann Funds. The business address of each Federated Trustee is 4000 Ericsson Drive, Warrendale, PA 15086-7561.
- (4) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 1,275,000 shares of Common Stock purchased in the Private Placement and (ii) 153,708 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants purchased in the Private Placement. The shares underlying the following Pre-Funded Warrants purchased in the Private Placement are not included in the shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” because they are subject to limitations on exercisability if such exercise would result in Boehringer Ingelheim International GmbH beneficially owning more than 19.99% of our outstanding Common Stock: 71,517 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants purchased in the Private Placement. The shares reported under “Number of Shares of Common Stock Being Offered” consist of the shares of Common Stock, including the shares of Common Stock issuable upon exercise of the

[Table of Contents](#)

Pre-Funded Warrants, purchased by Boehringer Ingelheim International GmbH in the Private Placement, without giving effect to the Beneficial Ownership Limitation. Boehringer Ingelheim International GmbH is an indirect wholly owned subsidiary of C. H. Boehringer Sohn AG & Co. KG, the General Partner of which is Boehringer AG (the “GP”). The GP and Boehringer Ingelheim International GmbH may each be deemed to have shared voting and dispositive power over all of the securities. The address of Boehringer Ingelheim International GmbH is Binger Straße 173, 55216 Ingelheim am Rhein Germany.

Relationships with Selling Stockholders

As discussed in greater detail above under the section titled “*Prospectus Summary—Private Placement*,” in June 2023, we entered into the Purchase Agreement with the Selling Stockholders, pursuant to which we sold and issued shares of our Common Stock and Pre-Funded Warrants to purchase shares of our Common Stock and agreed to file a registration statement with the SEC to cover the resale by the Selling Stockholders of the shares of our Common Stock, including the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants, issued pursuant to the Purchase Agreement.

None of the Selling Stockholders has had a material relationship with us or any of our predecessors or affiliates within the past three years, other than as a result of the ownership of our shares of Common Stock or other securities.

None of the Selling Stockholders has held any position or office with us or our affiliates within the last three years. However, pursuant to the Purchase Agreement, in connection with the Private Placement, Boehringer Ingelheim International GmbH has the right to designate an observer to attend, subject to certain exceptions, meetings of our board of directors and its committees, until the earlier of (i) the occurrence of a change of control and (ii) the date that it and its affiliates collectively hold less than 10% of shares of our Common Stock (including shares of our Common Stock held by such parties and shares of our Common Stock issuable upon exercise of any portion of the Pre-Funded Warrant issued to such parties and not yet exercised).

PLAN OF DISTRIBUTION

The Selling Stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of Common Stock or interests in shares of Common Stock received after the date of this prospectus from the Selling Stockholders as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of Common Stock or interests in shares of Common Stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The Selling Stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- block trades in which a 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;
- settlement of short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- through broker-dealers who may agree with the selling stockholders 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 by applicable law.

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

In connection with the sale of our Common Stock or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Common Stock in the course of hedging the positions they assume. The Selling Stockholders may also sell shares of our Common Stock short and deliver these securities to close out their short positions, or loan or pledge the Common Stock to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

[Table of Contents](#)

The aggregate proceeds to the Selling Stockholders from the sale of the Common Stock offered by the Selling Stockholders will be the purchase price of the Common Stock less discounts or commissions, if any. The Selling Stockholders reserve the right to accept and, together with their respective agents from time to time, to reject, in whole or in part, any proposed purchase of Common Stock to be made directly or through agents. We will not receive any of the proceeds from an offering of securities under this prospectus. Upon any exercise of the Pre-Funded Warrants by payment of cash, however, we will receive the exercise price of \$0.01 per share pursuant to the terms of the Pre-Funded Warrants.

A Selling Stockholder also may resell all or a portion of its shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that such Selling Stockholder meets the criteria and conforms to the requirements of that rule.

To the extent required, the shares of our Common Stock to be sold, the name of the Selling Stockholders, the respective purchase price and public offering price, the names of any agents or dealers, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the Common Stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Common Stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the Selling Stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the Selling Stockholders and their respective affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the Selling Stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The Selling Stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the Selling Stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the Selling Stockholders to use commercially reasonable efforts to cause the registration statement of which this prospectus constitutes a part to become effective and to remain continuously effective until the earlier of (i) the third anniversary of the effective date of this prospectus, (ii) the date all of the shares covered by this prospectus may be sold under Rule 144 of the Securities Act without being subject to any volume, manner of sale or publicly available information requirements or (iii) immediately prior to the closing of a sale, conveyance or other disposition of all or substantially all of the property or business of us (other than to a wholly-owned subsidiary of us), or a merger of consolidation with or into any other corporation or other business transaction or series of transactions as a result of which our stockholders immediately prior to the transaction would hold less than a majority of the voting interests of us (or successor or parent company thereof) after the transaction; provided that such transaction shall not include any transaction or series of related transaction principally for bona fide equity financing purposes.

LEGAL MATTERS

The validity of the shares of Common Stock to be offered for resale by the Selling Stockholders under this prospectus will be passed upon for us by Cooley LLP, Boston, Massachusetts.

EXPERTS

The financial statements of Minerva Neurosciences, Inc. as of December 31, 2022 and 2021, and for each of the two years in the period ended December 31, 2022, incorporated by reference in this prospectus by reference to Minerva Neurosciences, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the report of such firm, given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement that we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiaries and our securities. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements. You can obtain a copy of the registration statement from the SEC's website.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>.

We make available, free of charge, through our investor relations website, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, statements of changes in beneficial ownership of securities and amendments to those reports and statements as soon as reasonably practicable after they are filed with the SEC. The address for our website is www.minervaneurosciences.com. Information contained in or accessible through our website does not constitute a part of this prospectus and is not incorporated by reference in this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We also incorporate by reference into this prospectus the documents listed below and any future filings made by us with the SEC (other than Current Reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items and other portions of documents that are furnished, but not filed, pursuant to applicable rules promulgated by the SEC) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such reports and documents filed with the SEC after the date of the initial filing of the registration statement of which this prospectus forms a part but prior to the effectiveness of such registration statement:

- Our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2022, filed with the SEC on March 8, 2023, (as amended by [Amendment No.1 to our 2022 Annual Report on Form 10-K](#) filed with the SEC on April 20, 2023);

Table of Contents

- Our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2023 and June 30, 2023, filed with the SEC on [May 15, 2023](#) and [August 1, 2023](#), respectively;
- Our Current Reports on Form 8-K filed with the SEC on [May 1, 2023](#), [May 5, 2023](#), [June 2, 2023](#), [June 20, 2023](#) and [June 28, 2023](#) (in each case, except for information contained therein which is furnished rather than filed); and
- The description of our Common Stock in our registration statement on [Form 8-A](#) filed with the SEC on June 23, 2014, including any amendments or reports filed for the purpose of updating such description, including [Exhibit 4.2](#) to our Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. You should direct any requests for documents by writing us at 1500 District Avenue Burlington, MA 01803, or by telephoning us at (617) 600-7373.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

Up to 2,000,575 Shares

Common Stock



PROSPECTUS

, 2023

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution**

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by the Registrant (except any underwriting discounts and commissions and expenses incurred by the Selling Stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the Selling Stockholders in disposing of the shares). All amounts shown are estimates except the SEC registration fee.

SEC registration fee	\$ 1,975.35
Accountants' fees and expenses	30,000
Legal fees and expenses	75,000
Miscellaneous expenses	—
Total	\$ 106,975.35

Item 15. Indemnification of Officers and Directors

Section 145 of the Delaware General Corporation Law (the "DGCL"), empowers a Delaware corporation to indemnify any persons who are, or are threatened to be made, parties to any threatened, pending, or completed legal action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was an officer or director of such corporation, or is or was serving at the request of such corporation as a director, officer, employee, or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit, or proceeding, provided that such officer or director acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests, and, for criminal proceedings, had no reasonable cause to believe his conduct was illegal. A Delaware corporation may indemnify officers and directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation in the performance of his duty. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which such officer or director actually and reasonably incurred.

Our amended and restated certificate of incorporation provides for indemnification of our directors, officers, authorized representatives, and other agents to the maximum extent permitted by the DGCL, and our amended and restated bylaws provide for indemnification of our directors, officers, authorized representatives, and other agents to the maximum extent permitted by the DGCL. Our amended and restated bylaws also provide that the right of directors and officers to indemnification shall not be exclusive of any other right now possessed or hereafter acquired under any agreement, vote of stockholders or disinterested directors or otherwise. The amended and restated bylaws also permit us to secure insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions in such capacity, regardless of whether the amended and restated bylaws would permit indemnification of any such liability.

Section 102(b)(7) of the DGCL provides that directors shall not be personally liable for monetary damages for breaches of their fiduciary duty as directors except for (i) breaches of their duty of loyalty to us or our stockholders, (ii) acts or omissions not in good faith or which involve intentional misconduct or knowing violations of law, (iii) certain transactions under Section 174 of the DGCL (unlawful payment of dividends or unlawful stock purchases or redemptions), or (iv) transactions from which a director derives an improper personal benefit. Our amended and restated certificate of incorporation includes such a provision. The effect of

[Table of Contents](#)

this provision is to eliminate the personal liability of directors for monetary damages or actions involving a breach of their fiduciary duty of care, including any actions involving gross negligence.

In addition, we have entered into indemnification agreements with our directors and officers containing provisions that are in some respects broader than the specific indemnification provisions contained in the DGCL. The indemnification agreements require us to, among other things, indemnify our directors against certain liabilities that may arise by reason of their status or service as directors and to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that might be incurred by any director or officer in his capacity as such.

Item 16. Exhibits and Financial Statement Schedules

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation of the Registrant of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant’s Registration Statement on Form S-1/A (File No. 333-195169), filed with the SEC on June 10, 2014).
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant’s Current Report on Form 8-K (File No. 001-36517), filed with the SEC on June 17, 2022).
3.3	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant’s Quarterly Report on Form 10-Q (File No. 001-36517), filed with the SEC on November 4, 2019).
4.1	Reference is made to Exhibits 3.1 , 3.2 and 3.3 .
4.2	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant’s Registration Statement on Form S-1/A (File No. 333-195169) filed with the SEC on June 10, 2014).
4.3	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Registrant’s Current Report on Form 8-K (File No. 001-36517) filed with the SEC on June 28, 2023).
4.4	Securities Purchase Agreement, dated June 27, 2023, by and among Minerva Neurosciences, Inc. and the purchasers party thereto (incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K (File No. 001-36517) filed with the SEC on June 28, 2023).
5.1	Opinion of Cooley LLP.
23.1	Consent of Deloitte & Touche LLP.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Powers of Attorney (included on signature page).
107	Filing Fee Table.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(a) (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement or are contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date,

[Table of Contents](#)

supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Burlington, Commonwealth of Massachusetts, on this 4th day of August, 2023.

MINERVA NEUROSCIENCES, INC.

By: /s/ Remy Luthringer, Ph.D.
Remy Luthringer, Ph.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Remy Luthringer, Geoffrey Race and Frederick Ahlholm, and each one of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Remy Luthringer, Ph.D.</u> Remy Luthringer, Ph.D.	Chief Executive Officer and Chairman of the Board of Directors (<i>Principal Executive Officer</i>)	August 4, 2023
<u>/s/ Frederick Ahlholm</u> Frederick Ahlholm	Chief Financial Officer (<i>Principal Financial Officer</i> and <i>Principal Accounting Officer</i>)	August 4, 2023
<u>/s/ Hans Peter Hasler</u> Hans Peter Hasler	Member of the Board of Directors	August 4, 2023
<u>/s/ Jeryl Hilleman</u> Jeryl Hilleman	Member of the Board of Directors	August 4, 2023
<u>/s/ David Kupfer, M.D.</u> David Kupfer, M.D.	Member of the Board of Directors	August 4, 2023
<u>/s/ Fouzia Laghrissi-Thode, M.D.</u> Fouzia Laghrissi-Thode, M.D.	Member of the Board of Directors	August 4, 2023
<u>/s/ Jan van Heek</u> Jan van Heek	Member of the Board of Directors	August 4, 2023

August 4, 2023

Minerva Neurosciences, Inc.
1500 District Avenue
Burlington, MA 01803

Ladies and Gentlemen:

We have acted as counsel to Minerva Neurosciences, Inc., a Delaware corporation (the “**Company**”), in connection with the filing of a Registration Statement on Form S-3 (the “**Registration Statement**”) by the Company with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), covering the resale by certain selling stockholders (the “**Selling Stockholders**”) of up to 2,000,575 shares of the Company’s Common Stock, par value \$0.0001 per share (“**Common Stock**”), consisting of (i) 1,425,000 outstanding shares of Common Stock (the “**Shares**”) and (ii) up to 575,575 shares of Common Stock (the “**Warrant Shares**”) issuable upon the exercise of outstanding warrants to purchase shares of Common Stock (the “**Warrants**”). The Shares and the Warrants were issued pursuant to a Securities Purchase Agreement, dated June 27, 2023, by and among the Company and the purchasers named therein (the “**Securities Purchase Agreement**”).

In connection with this opinion, we have examined and relied upon the Registration Statement and related prospectus, the Company’s certificate of incorporation and bylaws, each as currently in effect, the Securities Purchase Agreement, the Warrants and such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

With respect to the Warrant Shares, we express no opinion to the extent that future issuances of securities of the Company, antidilution adjustments to outstanding securities of the Company and/or other matters cause the Warrants to be exercisable for more shares of Common Stock than the number available for issuance by the Company. Further, we have assumed the exercise price of the Warrants will not be adjusted to an amount below the par value per share of the Common Stock.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that (i) the Shares are validly issued, fully paid and nonassessable and (ii) the Warrant Shares, when issued against payment therefor in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable.

We hereby consent to the reference to our firm under the caption "Legal Matters" in the prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

COOLEY LLP

By: /s/ Ryan Sansom

Ryan Sansom, Partner

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 8, 2023 relating to the financial statements of Minerva Neurosciences, Inc., appearing in the Annual Report on Form 10-K of Minerva Neurosciences, Inc. for the year ended December 31, 2022. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ Deloitte & Touche LLP

Boston, Massachusetts

August 4, 2023

Calculation of Filing Fee Tables

Form S-3
(Form Type)

Minerva Neurosciences, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered(1)(2)	Proposed Maximum Offering Price Per Share(3)	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Equity	Common Stock, par value \$0.0001 per share	457(c)	2,000,575	\$8.96	\$17,925,152	0.00011020	\$1,975.35
	Total Offering Amounts					\$17,925,152		\$1,975.35
	Total Fees Previously Paid							—
	Total Fee Offsets							—
	Net Fee Due							\$1,975.35

- (1) The shares of common stock will be offered for resale by the selling stockholders pursuant to the prospectus contained herein. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the “*Securities Act*”), this registration statement also covers any additional number of shares of common stock issuable upon stock splits, stock dividends, or other distribution, recapitalization or similar events with respect to the shares of common stock being registered pursuant to this registration statement.
- (2) This registration statement registers the resale of (i) 1,425,000 outstanding shares of common stock of the Registrant held by the selling stockholders and (ii) 575,575 shares of common stock of the Registrant issuable upon the exercise of outstanding pre-funded warrants to purchase shares of common stock held by the selling stockholders.
- (3) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based on average of high and low price per share of the common stock as reported on the Nasdaq Capital Market on July 28, 2023.