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

SCHEDULE 13D
Under the Securities Exchange Act of 1934

MINERVA NEUROSCIENCES, INC.
(Name of Issuer)

Common Stock, par value \$0.0001 per share
(Title of Class of Securities)

603380106
(CUSIP Number)

Boehringer Ingelheim International GmbH
Binger Straße 173
55216 Ingelheim am Rhein, Germany
Attention: Head of Corp. Legal Governance and M&A
+4961327790954
(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

June 27, 2023
(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of § 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7(b) for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

SCHEDULE 13D

CUSIP No. 603380106

1	NAME OF REPORTING PERSONS Boehringer AG	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (See Instructions) WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Germany	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 1,500,225 (1)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 1,500,225 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,500,225 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 20.79% (2)	
14	TYPE OF REPORTING PERSON (See Instructions) CO	

- (1) Comprised of 1,275,000 shares of Common Stock (as defined herein) and an additional 225,225 shares of Common Stock receivable upon exercise of Pre-Funded Warrants (as defined herein). All securities are held directly by Boehringer Ingelheim International GmbH ("International GmbH"), a wholly owned indirect subsidiary of C. H. Boehringer Sohn AG & Co. KG ("Parent"). Boehringer AG (the "GP") is the General Partner of Parent. The GP and International GmbH may each be deemed to have shared voting and dispositive power over all of the securities. This presentation of the beneficial ownership of the Reporting Persons does not give effect to the Beneficial Ownership Limitation (as defined herein).
- (2) Based on (i) 5,568,406 shares of Common Stock issued and outstanding as of May 10, 2023, as reported by the Issuer (as defined herein) in its Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, (ii) 1,425,000 shares of Common Stock issued in the Private Placement (as defined herein) and (iii) 225,225 shares of Common Stock issuable within 60 days of the date hereof upon the exercise of Pre-Funded Warrant held by International GmbH. The calculation of the beneficial ownership of the Reporting Persons does not give effect to the Beneficial Ownership Limitation (as defined herein).

1	NAME OF REPORTING PERSONS Boehringer Ingelheim International GmbH	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (See Instructions) WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Germany	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 1,500,225 (1)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 1,500,225 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,500,225 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 20.79% (2)	
14	TYPE OF REPORTING PERSON (See Instructions) CO	

- (1) Comprised of 1,275,000 shares of Common Stock and an additional 225,225 shares of Common Stock receivable upon exercise of Pre-Funded Warrants. All securities are held directly by International GmbH, a wholly owned indirect subsidiary of Parent. The GP is the General Partner of Parent. The GP and International GmbH may each be deemed to have shared voting and dispositive power over all of the securities. This presentation of the beneficial ownership of the Reporting Persons does not give effect to the Beneficial Ownership Limitation.
- (2) Based on (i) 5,568,406 shares of Common Stock issued and outstanding as of May 10, 2023, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, (ii) 1,425,000 shares of Common Stock issued in the Private Placement and (iii) 225,225 shares of Common Stock issuable within 60 days of the date hereof upon the exercise of Pre-Funded Warrant held by International GmbH. The calculation of the beneficial ownership of the Reporting Persons does not give effect to the Beneficial Ownership Limitation.

Item 1. Security and Issuer

This Schedule 13D (the “Statement”) relates to the common stock, par value \$0.001 per share (the “Common Stock”), of Minerva Neurosciences, Inc., a Delaware corporation (the “Issuer”). The Issuer’s principal executive offices are located at 1500 District Avenue, Burlington, MA 01803.

Item 2. Identity and Background

This Statement is being filed on behalf of each of the following persons (each a “Reporting Person” and, collectively, the “Reporting Persons”):

(i) Boehringer AG, a stock corporation (*Aktiengesellschaft*) organized under the laws of the Federal Republic of Germany (the “GP”), with its principal business address at Binger Straße 173, 55216 Ingelheim am Rhein, Germany; and

(ii) Boehringer Ingelheim International GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) organized under the laws of the Federal Republic of Germany (“International GmbH”), with its principal business address at Binger Straße 173, 55216 Ingelheim am Rhein, Germany.

International GmbH is part of the broader Boehringer Ingelheim group of companies (“Boehringer Ingelheim”) and GP is the general partner of Parent (as defined herein). Boehringer Ingelheim is a research-driven pharmaceutical company working on innovation in areas of high unmet medical need. More than 53,000 employees serve over 130 markets in the two business units, Human Pharma and Animal Health.

The members of the Board of Management and Supervisory Board of the GP and of the Board of Management of International GmbH are set forth on Schedule I, attached hereto. Schedule I sets forth the following information with respect to each such person:

(a) name;

(b) business address;

(c) position with the Reporting Person and present principal occupation or employment and, for persons not employed by the Reporting Persons, the name, principal business and address of any corporation or other organization in which such employment is conducted; and

(f) citizenship.

During the last five years, neither of the Reporting Persons nor any person named in Schedule I has been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction, as a result of which, he, she or it was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

On June 27, 2023, the Issuer entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain institutional accredited investors, including International GmbH, pursuant to which the Issuer agreed to issue and sell 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, for an aggregate purchase price of \$19,999,994.25. On June 30, 2023 (the “Closing Date”), the Private Placement closed.

In the Private Placement, International GmbH purchased 1,275,000 shares of Common Stock (the “Shares” and, together with the Pre-Funded Warrant, the “Securities”) and a Pre-Funded Warrant to purchase up to an additional 225,225 shares of Common Stock for an aggregate purchase price of \$14,999,997.95. International GmbH’s purchase of the Securities was funded with general working capital and cash on hand.

Item 4. Purpose of Transaction

The responses set forth in Item 3 and 6 hereof are incorporated by reference in their entirety.

The Reporting Persons acquired the Securities for investment purposes. The Reporting Persons intend to review their investment in the Issuer on a continuing basis, and may determine (i) to acquire additional securities of the Issuer through open market purchases, private agreements or otherwise, or (ii) to dispose of all or a portion of the securities of the Issuer owned by them through public offerings (including pursuant to a resale registration statement to be filed by the Issuer) or private transactions, in each case, as permitted by the Purchase Agreement, or (iii) to take any other available course of action.

From time to time, the Reporting Persons intend to engage in discussions with the Board of Directors of the Issuer and/or members of the Issuer’s management team concerning a broad range of operational and strategic matters, including, without limitation, the Issuer’s business, operations, capital structure, governance, management, and strategy as well as potential financings, business combinations, strategic alternatives, and other matters concerning the Issuer, including transactions in which the Reporting Persons may seek to participate and potentially engage. The Reporting Persons may communicate with other stockholders or third parties regarding the foregoing, subject to the terms of the Purchase Agreement.

Notwithstanding anything contained herein, the Reporting Persons specifically reserve the right to change their intention with respect to any or all of such matters. In reaching any decision as to their course of action (as well as to the specific elements thereof), the Reporting Persons currently expect that they would take into consideration a variety of factors, including, but not limited to, the following: the Issuer’s business and prospects, other developments concerning the Issuer and its businesses generally, other business opportunities available to the Reporting Persons, developments with respect to the business of the Reporting Persons, changes in law and government regulations, general economic conditions, and money and stock market conditions, including the market price of the securities of the Issuer.

Except as set forth in this Item 4 of this Statement, the Reporting Persons do not have any present plans or proposals that relate to or would result in any of the actions specified in clauses (a) through (j) of the instructions to Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

(a)-(b)

Number of shares of Common Stock beneficially owned (including shares receivable upon exercise of the Pre-Funded Warrant):

GP	1,500,225 shares
International GmbH	1,500,225 shares

Percent of class:

GP	20.79%
International GmbH	20.79%

Calculated based on (i) 5,568,406 shares of Common Stock issued and outstanding as of May 10, 2023, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, (ii) 1,425,000 shares of Common Stock issued in the Private Placement and (iii) 225,225 shares of Common Stock issuable within 60 days of the date hereof upon the exercise of Pre-Funded Warrant held by International GmbH. This presentation of the beneficial ownership of the Reporting Persons does not give effect to the Beneficial Ownership Limitation (as defined herein).

Number of shares of Common Stock (including shares receivable upon exercise of the Pre-Funded Warrant) as to which such person has:

(i) Sole power to vote or to direct the vote:

GP	0 shares
International GmbH	0 shares

(ii) Shared power to vote or to direct the vote:

GP	1,500,225 shares
International GmbH	1,500,225 shares

(iii) Sole power to dispose or to direct the disposition of:

GP	0 shares
International GmbH	0 shares

(iv) Shared power to dispose or to direct the disposition of:

GP	1,500,225 shares
International GmbH	1,500,225 shares

International GmbH is a wholly owned indirect subsidiary of C. H. Boehringer Sohn AG & Co. KG (“Parent”). The GP is the General Partner of Parent. The GP and International GmbH may each be deemed to have shared voting and dispositive power over all of the securities. This presentation of the beneficial ownership of the Reporting Persons does not give effect to the Beneficial Ownership Limitation.

None of the individuals listed on Schedule I beneficially own any of the Issuer’s Common Stock.

(c) Except as reported in this Statement, neither the Reporting Persons nor any of the individuals listed on Schedule I have effected any transactions in the Common Stock during the past sixty (60) days.

(d) Not applicable.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationship with Respect to Securities of the Issuer

On June 27, 2023, the Issuer entered into the Purchase Agreement with certain institutional accredited investors, including International GmbH. Pursuant to the Purchase Agreement, the Issuer agreed to issue and sell to International GmbH in the Private Placement (i) an aggregate of 1,275,000 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 to purchase an aggregate of 225,225 shares of Common Stock at a purchase price of \$9.99 per Pre-Funded Warrant. The price per Pre-Funded Warrant represented the price of \$10.00 per Share sold in the Private Placement, minus the \$0.01 per share exercise price of each such Pre-Funded Warrant. The Private Placement closed on June 30, 2023.

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 held by International GmbH provide that the holder does not have the right to exercise any portion of its Pre-Funded Warrants to the extent the holder, together with its affiliates, after giving effect to such exercise, would beneficially own in excess of 19.99%, immediately after giving effect to such exercise (the “Beneficial Ownership Limitation”); provided, however, that the holder may increase or decrease the Beneficial Ownership Limitation by giving 61 days’ notice to the Issuer, but not to any percentage in excess of 19.99%.

Pursuant to the Purchase Agreement, the Issuer has agreed to file a registration statement covering the resale of the Registrable Securities (as such term is defined in the Purchase Agreement) on or before the date that is 45 days after the Closing Date (the “Filing Deadline”). The Issuer has agreed to use its reasonable best efforts to keep such registration statement effective until the earlier of (i) the third anniversary of the effective date of the initial registration statement covering the Registrable Securities, (ii) the date all Shares and all shares of Common Stock underlying the Pre-Funded Warrants may be sold under Rule 144 without being subject to any volume, manner of sale or publicly available information requirements and (iii) immediately prior to the closing of a Change of Control (as such term is defined in the Purchase Agreement). The Issuer has agreed to be responsible for all expenses incurred in connection with the registration of the Registrable Securities.

Pursuant to the Purchase Agreement, International GmbH has the right to designate an observer to attend, subject to certain exceptions, meetings of the Issuer’s 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 the Issuer’s Common Stock (which is calculated by including in the amount of Common Stock held by International GmbH and its affiliates any shares of Common Stock issuable upon exercise of any portion of the Pre-Funded Warrant issued to International GmbH and not then exercised).

The foregoing description of the Purchase Agreement and the Pre-Funded Warrants does not purport to be complete and is qualified in its entirety by reference to the Purchase Agreement and the Pre-Funded Warrant, a copy of which is attached hereto as Exhibit 2 and Exhibit 3, respectively, and incorporated into this Item 6 by reference.

Item 7. Materials to Be Filed as Exhibits

- Exhibit 1 [Joint Filing Agreement among Boehringer AG and Boehringer Ingelheim International GmbH.](#)
- Exhibit 2 [Securities Purchase Agreement between the Issuer and Boehringer Ingelheim International GmbH, dated June 27, 2023 \(incorporated by reference to Exhibit 10.1 to the Issuer’s Current Report on Form 8-K, SEC File No. 001-36517, filed June 28, 2023\).](#)
- Exhibit 3 [Form of Pre-Funded Warrant \(incorporated by reference to Exhibit 4.1 to the Issuer’s Current Report on Form 8-K, SEC File No. 001-36517, filed June 28, 2023\).](#)

SIGNATURE

After reasonable inquiry and to the best of each of the undersigned's knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: July 7, 2023

BOEHRINGER AG

By: /s/ Christoph Gauger

Name: Christoph Gauger

Title: Registered Manager (*Prokurist*)

By: /s/ Martin Bergmann

Name: Martin Bergmann

Title: Registered Manager (*Prokurist*)

Date: July 7, 2023

BOEHRINGER INGELHEIM INTERNATIONAL GMBH

By: /s/ Frank Hübler

Name: Frank Hübler

Title: Registered Manager (*Prokurist*)

By: /s/ Dr. Martin Schwarz

Name: Dr. Martin Schwarz

Title: Registered Manager (*Prokurist*)

Schedule I

Boehringer AG

The name and present principal occupation of each member of the Board of Managers and Supervisory Board of the GP are set forth below. Unless otherwise noted, each of these persons has as their business address Binger Straße 173, 55216 Ingelheim am Rhein, Germany.

<u>Name</u>	<u>Position with the GP</u>	<u>Principal Occupation</u>	<u>Name, Principal Business and Address of Employer (if other than the GP)</u>	<u>Citizenship</u>
Christian Ernst Boehringer	Chairman of the Supervisory Board	Manager		German
Christoph Friedrich Boehringer	Member of the Supervisory Board	Manager		German
Erich Konrad Gyula von Baumbach	Member of the Supervisory Board	Manager		German
Carinne Knoche-Brouillon	Member of the Board	Manager/Pharmacist	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	German/French
Dr. Michel Pairet	Member of the Board	Manager/Veterinarian/Pharmacologist	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	French
Jean Scheftsik de Szolnok	Member of the Board	Manager/Lawyer	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	French
Michael Schmelmer	Member of the Board	Manager/Engineer	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	German
Hubertus von Baumbach	Chairman of the Board	Manager/Lawyer	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	German

Boehringer Ingelheim International GmbH

The name and present principal occupation of each member of the Board of Managers and Supervisory Board of International GmbH are set forth below. Unless otherwise noted, each of these persons has as their business address Binger Straße 173, 55216 Ingelheim am Rhein, Germany.

<u>Name</u>	<u>Position with International GmbH</u>	<u>Principal Occupation</u>	<u>Name, Principal Business and Address of Employer (if other than International GmbH)</u>	<u>Citizenship</u>
Dr. Sebastian Guntrum	Managing Director	Manager/Lawyer	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	German
Lykke Hinsch Gylvin	Managing Director	Manager/Physician		Danish
Carinne Knoche-Brouillon	Managing Director	Manager/Pharmacist	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	German/French
Dr. Torsten Mau	Managing Director	Manager/Pharmaceutical Scientist		German
Dr. Michel Pairet	Managing Director	Manager/Veterinarian/Pharmacologist	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	French
Torsten Rieck	Managing Director	Manager/Engineer	C. H. Boehringer Sohn AG & Co. KG, Binger Str. 173, 55216 Ingelheim am Rhein, Germany	German

JOINT FILING AGREEMENT

The undersigned acknowledge and agree that the foregoing statement on Schedule 13D is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13D shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him, her or it contained herein, but shall not be responsible for the completeness and accuracy of the information concerning the other entities or persons, except to the extent that he, she or it knows or has reason to believe that such information is inaccurate.

Date: July 7, 2023

BOEHRINGER AG

By: /s/ Christoph Gauger

Name: Christoph Gauger

Title: Registered Manager (*Prokurist*)

By: /s/ Martin Bergmann

Name: Martin Bergmann

Title: Registered Manager (*Prokurist*)

Date: July 7, 2023

BOEHRINGER INGELHEIM INTERNATIONAL GMBH

By: /s/ Frank Hübler

Name: Frank Hübler

Title: Registered Manager (*Prokurist*)

By: /s/ Dr. Martin Schwarz

Name: Dr. Martin Schwarz

Title: Registered Manager (*Prokurist*)