As filed with the Securities and Exchange Commission on July 31, 2026

Registration No. 333-

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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

NEUROCRINE BIOSCIENCES, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**33-0525145**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

6027 Edgewood Bend Court
San Diego, CA 92130
(Address of Principal Executive Offices)

Neurocrine Biosciences, Inc. 2025 Equity Incentive Plan
(Full Title of the Plan)

Kyle W. Gano, Ph.D.
Chief Executive Officer
Neurocrine Biosciences, Inc.
6027 Edgewood Bend Court
San Diego, CA 92130
(Name and Address of Agent for Service)

(858) 617-7600
(Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Darin M. Lippoldt	**Jason L. Kent, Esq.**
Chief Legal Officer	**Carlos A. Ramirez, Esq.**
Neurocrine Biosciences, Inc.	**Cooley LLP**
6027 Edgewood Bend Court	**10265 Science Center Drive**
San Diego, CA 92130	**San Diego, CA 92121**
(858) 617-7600	**(858) 550-6000**

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. ☐

**INCORPORATION BY REFERENCE OF CONTENTS
OF REGISTRATION STATEMENT ON FORM S-8**

This Registration Statement on Form S-8 is being filed for the purpose of increasing the number of securities of the same class as other securities for which a Registration Statement on Form S-8 relating to the same benefit plan is effective. This Registration Statement on Form S-8 registers the offer and sale of an additional 4,000,000 shares of the Registrant's common stock for issuance under the Neurocrine Biosciences, Inc. 2025 Equity Incentive Plan (as amended, the "***2025 Plan***"). The Registrant previously registered shares of its common stock for issuance under the 2025 Plan on May 21, 2025 (File No. 333-287477). Pursuant to General Instruction E to Form S-8, this Registration Statement hereby incorporates by reference the contents of the Registration Statement referenced above.

ITEM 8. EXHIBITS.

Exhibit		
4.1	Description:	Certificate of Incorporation, as amended
	Reference:	Incorporated by reference to Exhibit 3.1 of the Registrant's Quarterly Report on Form 10-Q filed on November 5, 2018
4.2	Description:	Bylaws, as amended
	Reference:	Incorporated by reference to Exhibit 3.2 of the Registrant's Quarterly Report on Form 10-Q filed on October 30, 2024
4.3	Description:	Form of Common Stock Certificate
	Reference:	Incorporated by reference to the Registrant's Registration Statement on Form S-1 (Registration No. 333-03172)
4.4	Description:	Description of Common Stock of the Registrant
	Reference:	Incorporated by reference to Exhibit 4.2 of the Registrant's Annual Report on Form 10-K filed on February 1, 2026
5.1	Description:	Opinion of Cooley LLP
23.1	Description:	Consent of Independent Registered Public Accounting Firm
23.2	Description:	Consent of Cooley LLP (included in Exhibit 5.1)
24.1	Description:	Power of Attorney (included on the signature page hereto)
99.1	Description:	Neurocrine Biosciences, Inc. 2025 Equity Incentive Plan, as amended
	Reference:	Incorporated by reference to Exhibit 10.3 of the Registrant's Quarterly Report on Form 10-Q filed on July 31, 2026
107	Description:	Filing Fee Table

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-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on July 31, 2026.

NEUROCRINE BIOSCIENCES, INC.

By: /s/ Kyle W. Gano

Kyle W. Gano, Ph.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints KYLE W. GANO, PH.D., MATTHEW C. ABERNETHY and DARIN M. LIPPOLDT, and each or either of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her 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 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 or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Kyle W. Gano Kyle W. Gano, Ph.D.	Chief Executive Officer and Director *(Principal Executive Officer)*	July 31, 2026
/s/ Matthew C. Abernethy Matthew C. Abernethy	Chief Financial Officer *(Principal Financial and Accounting Officer)*	July 31, 2026
/s/ William H. Rastetter William H. Rastetter, Ph.D.	Chairman of the Board of Directors	July 31, 2026
/s/ Kevin C. Gorman Kevin C. Gorman, Ph.D.	Director	July 31, 2026
/s/ Gary A. Lyons Gary A. Lyons	Director	July 31, 2026
/s/ Johanna Mercier Johanna Mercier	Director	July 31, 2026
/s/ George J. Morrow George J. Morrow	Director	July 31, 2026
/s/ Leslie V. Norwalk Leslie V. Norwalk	Director	July 31, 2026
/s/ Christine A. Poon Christine A. Poon	Director	July 31, 2026
/s/ Richard F. Pops Richard F. Pops	Director	July 31, 2026
/s/ Shalini Sharp Shalini Sharp	Director	July 31, 2026
/s/ Stephen A. Sherwin Stephen A. Sherwin, M.D.	Director	July 31, 2026

Calculation of Filing Fee Table

Form S-8

Neurocrine Biosciences, Inc.

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered[(1)]	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common stock, $0.001 par value per share, 2025 Equity Incentive Plan	Other[(2)]	4,000,000[(3)]	$175.365[(2)]	$ 701,460,000.00	0.0001381	$ 96,871.63
Total Offering Amounts					$ 701,460,000.00		$ 96,871.63
Total Fee Offsets							—
Net Fee Due							$ 96,871.63

(1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended, this Registration Statement shall also cover any additional shares of common stock of Neurocrine Biosciences, Inc. (the **"Registrant"**) that become issuable under the Registrant's 2025 Equity Incentive Plan (the **"2025 Plan"**) by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of Registrant's common stock, as applicable.

(2) Estimated in accordance with Rule 457(c) and (h) solely for the purpose of calculating the registration fee on the basis of 175.365 per share of common stock, which represents the average of the high and low prices of the Registrant's common stock as reported on The Nasdaq Global Select Market on July 24, 2026.

(3) Represents 4,000,000 additional shares of Registrant's common stock that were added to the shares authorized for issuance under the 2025 Plan on May 27, 2026 pursuant to approval of the stockholders at the 2026 Annual Meeting of Stockholders.

Cooley

Carlos A. Ramirez
+1 858 550 6157
cramirez@cooley.com

July 31, 2026

Neurocrine Biosciences, Inc.
6027 Edgewood Bend Court
San Diego, CA 92130

Ladies and Gentlemen:

We have acted as counsel to Neurocrine Biosciences, Inc., a Delaware corporation (the "***Company***"), in connection with the filing by the Company of a Registration Statement on Form S-8 (the "***Registration Statement***") with the Securities and Exchange Commission (the "***Commission***"), covering the offering of up to 4,000,000 shares (the "***Shares***") of the Company's common stock, $0.001 par value, issuable pursuant to the Company's 2025 Equity Incentive Plan (the "***Plan***").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the related prospectus, (b) the Plan, (c) the Company's certificate of incorporation and bylaws, each as currently in effect, and (d) such other records, documents, opinions, certificates, memoranda and 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. 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.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plan, the Registration Statement and the related prospectus, will be validly issued, fully paid, and nonassessable (except as to Shares issued pursuant to deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

This opinion is limited to the matters expressly set forth in this letter, and no opinion has been or should be implied, or may be inferred, beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof and we have no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

We consent 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 of 1933, as amended, or the rules and regulations of the Commission thereunder.

Sincerely,

Cooley LLP

By: /s/ Carlos A. Ramirez
Carlos A. Ramirez

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Neurocrine Biosciences, Inc. 2025 Equity Incentive Plan of our reports dated February 11, 2026, with respect to the consolidated financial statements of Neurocrine Biosciences, Inc. and the effectiveness of internal control over financial reporting of Neurocrine Biosciences, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2025, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Diego, California
July 31, 2026