

As filed with the Securities and Exchange Commission on February 9, 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

CLEARPOINT NEURO, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

58-2394628

(I.R.S. Employer
Identification No.)

**120 S. Sierra Ave., Suite 100
Solana Beach, California**

(Address of principal executive offices)

92075

(Zip Code)

New Hire Inducement Stock Option Grants and Restricted Share Awards

(Full title of the plans)

**Ellisa Cholapranee
General Counsel and Secretary
120 S. Sierra Ave., Suite 100
Solana Beach, California 92075**

(Name and address of agent for service)

(888) 287-9109

(Telephone number, including area code, of agent for service)

With copies to:

**John Tishler, Esq.
Sheppard, Mullin, Richter & Hampton LLP
12275 El Camino Real, Suite 100
San Diego, CA, 92130-4092
(858) 720-8900**

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 ☐
Non-accelerated filer ☒

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. ☐

EXPLANATORY NOTE

ClearPoint Neuro, Inc. (the “Company,” “we,” “us,” or “our”) is filing this Registration Statement on Form S-8 (this “Registration Statement”) for the purpose of registering 405,000 shares of its common stock, par value \$0.01 per share (the “Common Stock”). Such shares of Common Stock consist of: (a) 330,000 shares that may be issued upon the exercise of a non-qualified stock option granted to the Company’s President, and Chief Executive Officer, Joseph M. Burnett, on November 7, 2017 (the “Burnett Stock Option”); and (b) 75,000 shares that may be issued upon the exercise of a non-qualified stock option granted to the Company’s Chief Financial Officer, Danilo D’Alessandro, on September 29, 2020 (the “D’Alessandro Stock Option”). Each of the Burnett Stock Option and D’Alessandro Stock Option (collectively, the “Inducement Awards”) were granted by the Company’s board of directors as an inducement to the applicable individual to commence employment with the Company. Each of the Inducement Awards were granted outside of the Company’s 2013 Incentive Compensation Plan, and with respect to the Inducement Award granted to Mr. D’Alessandro, in accordance with Nasdaq Listing Rule 5635(c)(4). The Common Stock was not listed on any national securities exchange at the time the Inducement Award was granted to Mr. Burnett.

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified in Item 1 and Item 2 of Part I of Form S-8 is omitted from this Registration Statement in accordance with the provisions of Rule 428 under the Securities Act of 1933, as amended (the “Securities Act”), and the introductory note to Part I of Form S-8. The documents containing the information specified in Part I of Form S-8 will be delivered to the participants in the equity benefit plan covered by this Registration Statement as specified by Rule 428(b)(1) under the Securities Act.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, or excerpts thereof as indicated, filed by the Company with the U.S. Securities and Exchange Commission (the “SEC”) are incorporated herein by reference:

- the Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2024, filed with the SEC on February 26, 2025 (the “2024 10-K”), including all material incorporated by reference therein, which includes the portions of the Company’s [definitive proxy statement on Schedule 14A](#) filed with the SEC on April 9, 2025, incorporated by reference into Part III of the 2024 10-K;
- the Quarterly Report on [Form 10-Q](#) for the quarterly period ended March 31, 2025, filed with the SEC on May 13, 2025;
- the Quarterly Report on [Form 10-Q](#) for the quarterly period ended June 30, 2025, filed with the SEC on August 12, 2025;
- the Quarterly Report on [Form 10-Q](#) for the quarterly period ended September 30, 2025, filed with the SEC on November 6, 2025;
- the Current Reports on Form 8-K (excluding any reports or portions thereof that are deemed to be furnished and not filed) filed with the SEC on each of [May 12, 2025](#), [May 19, 2025](#), [May 23, 2025](#), [June 17, 2025](#), [November 6, 2025](#), [November 20, 2025](#), [January 5, 2026](#) and [February 5, 2026](#).
- the description of the Common Stock contained in Registration Statement on [Form 8-A12B](#) filed with the SEC on December 6, 2019, including any amendment or report (or any exhibit to any amendment or report) filed with the SEC for the purposes of updating such description, including the description of the Common Stock contained in [Exhibit 4.4](#) to the 2024 10-K.

The SEC file number for each of the documents listed above is 001-34822.

In addition, all documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered hereby have been sold or

that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing such documents; provided, however, that documents, or portions thereof, that are furnished and not filed in accordance with SEC rules, including information reported under Item 2.02 or Item 7.01 of any Current Report on Form 8-K and exhibits furnished with such reports that are related to such items, shall not be deemed incorporated by reference into this Registration Statement. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement herein or in any subsequently filed document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not constitute a part of this Registration Statement, except as so modified or superseded.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

Delaware Law

Section 102 of the Delaware General Corporation Law (the “DGCL”) permits a corporation to eliminate or limit the personal liability of directors and officers of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director or officer, except where the director or officer breached their duty of loyalty to the corporation or its stockholders, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145(a) of the DGCL provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person’s conduct was unlawful. Section 145(b) of the DGCL provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys’ fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper. To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145 of the DGCL, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys’ fees) actually and reasonably incurred by such person in connection therewith.

Any indemnification under subsections (a) and (b) of Section 145 of the DGCL (unless ordered by a court) shall be made by us only if the commencement of such proceeding (or part thereof) by such present or former director, officer, employee or agent was authorized in the specific case by our board of directors. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination: (1) by a majority vote of the

directors who are not parties to such action, suit or proceeding, even though less than a quorum; (2) by a committee of such directors designated by majority vote of such directors, even though less than a quorum; (3) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion; or (4) by the stockholders. Expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding must be paid by the corporation in advance of the final disposition of such action, suit or proceeding; provided, however, that to the extent required by law, such payment of expenses in advance of the final disposition of the such proceeding shall be made only upon receipt of an undertaking by or on behalf of such director or officer to repay such amount advanced if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this section. If a claim for indemnification (following the final disposition of such proceeding) or advancement of expenses is not paid in full within 30 days after a written claim therefor by such director or officer has been received by the corporation, such director or officer may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim to the fullest extent permitted by law. In any such action the corporation shall have the burden of proving that such director or officer is not entitled to the requested indemnification or advancement of expenses under applicable law. The indemnification and advancement of expenses provided by, or granted pursuant to, Section 145 shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. Section 145 of the DGCL also empowers a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under Section 145.

Governing Documents

Article XI of our Fourth Amended and Restated Bylaws ("Bylaws") provide that directors, officers, employees and agents shall be indemnified to the fullest extent permitted by applicable law. Article VIII of our Amended and Restated Certificate of Incorporation ("Certificate of Incorporation") provides that (i) our directors shall not be liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL, and (ii) we shall, subject to specified limitations, indemnify and hold harmless, to the fullest extent permitted by applicable law, any person (a "Covered Person") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was one of our directors or officers or, while one of our directors or officers, is or was serving at our request as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Covered Person.

Indemnification Agreements

We have entered into indemnification agreements with each of our current directors and executive officers to provide these directors and executive officers additional contractual assurances regarding the scope of the indemnification set forth in our Certificate of Incorporation and Bylaws and to provide additional procedural protections. The indemnification provisions in our Certificate of Incorporation, our Bylaws, and the indemnification agreements entered into between us and each of its directors and executive officers may be sufficiently broad to permit indemnification of our directors and executive officers for liabilities arising under the Securities Act. We also carry liability insurance for our directors and officers.

Other

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by one of our directors, officers or controlling persons 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, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent,

submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

The following exhibits are filed as a part of or incorporated by reference into this Registration Statement:

Exhibit Number	Description
4.1	Amended and Restated Certificate of Incorporation of MRI Interventions, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's quarterly report on Form 10-Q filed on May 11, 2012; File No. 000-54575).
4.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of MRI Interventions, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 8, 2015).
4.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of MRI Interventions, Inc. (incorporated herein by reference to Exhibit 3.3 to the Company's Registration Statement on Form S-1 filed on August 2, 2016).
4.4	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of ClearPoint Neuro, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 12, 2020).
4.5	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of ClearPoint Neuro, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 25, 2023).
4.6	Fourth Amended and Restated Bylaws of ClearPoint Neuro, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on December 14, 2022).
5.1*	Opinion of Sheppard, Mullin, Richter & Hampton LLP
23.1*	Consent of Cherry Bekart LLP
23.2*	Consent of Cherry Bekart LLP
23.3*	Consent of Sheppard, Mullin, Richter & Hampton LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included as part of the signature page to this Registration Statement).
99.1	Non-Qualified Stock Option Agreement made effective as of November 7, 2017 by and between the registrant and Joseph M. Burnett (incorporated herein by reference to Exhibit C to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on October 10, 2017).
99.2	Non-Qualified Stock Option Agreement made effective as of September 29, 2020 by and between the registrant and Danilo D'Alessandro (incorporated herein by reference to Exhibit C to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on September 14, 2020).
107*	Filing Fee Table

* Filed herewith.

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(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 of 1933;

(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 the 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth

in the “Calculation of Filing Fee Tables” or “Calculation of Registration Fee” table, as applicable, in the effective Registration Statement;

(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 paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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; and

(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.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant’s annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan’s annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) 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 of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in “Item 6. Indemnification of Directors and Officers” above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 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-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Solana Beach, State of California, on February 9, 2026.

CLEARPOINT NEURO, INC.

By: /s/ Joseph M. Burnett

Joseph M. Burnett
Chief Executive Officer and President
(Principal Executive Officer)

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints Joseph M. Burnett and Danilo D'Alessandro and each of them, with full power of substitution and resubstitution and full power to act without the other, as his true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file, this registration statement under the Securities Act of 1933, as amended, and any one or more amendments to any part of this registration statement, including any post-effective amendments, or appendices or supplements that may be required to be filed under the Securities Act of 1933, as amended, to keep such registration statement effective or to terminate its effectiveness, with all exhibits and any and all documents required to be filed with respect thereto, with the Securities and Exchange Commission or any regulatory authority, granting unto such attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises in order to effectuate the same, as fully to all intents and purposes as he or she himself or herself might or could do, if personally present, hereby ratifying and confirming all that said attorneys-in-fact and agents, and any of them and his substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
<u>/s/ Joseph M. Burnett</u> Joseph M. Burnett	President, and Chief Executive Officer and Director (Principal Executive Officer)	February 9, 2026
<u>/s/ Danilo D'Alessandro</u> Danilo D'Alessandro	Chief Financial Officer (Principal Financial and Accounting Officer)	February 9, 2026
<u>/s/ R. John Fletcher</u> R. John Fletcher	Chairman and Director	February 9, 2026
<u>/s/ Lynnette C. Fallon</u> Lynnette C. Fallon	Director	February 9, 2026
<u>/s/ Pascal E.R. Girin</u> Pascal E.R. Girin	Director	February 9, 2026
<u>/s/ B. Kristine Johnson</u> B. Kristine Johnson	Director	February 9, 2026
<u>/s/ Matthew B. Klein</u> Matthew B. Klein	Director	February 9, 2026
<u>/s/ Linda M. Liao</u> Linda M. Liao	Director	February 9, 2026
<u>/s/ Timothy T. Richards</u> Timothy T. Richards	Director	February 9, 2026



Sheppard, Mullin, Richter & Hampton LLP
12275 El Camino Real, Suite 100
San Diego, California 92130-4092
858.720.8900 main
858.509.3691 fax
www.sheppardmullin.com

February 9, 2026

VIA ELECTRONIC MAIL

ClearPoint Neuro, Inc.
120 S. Sierra Avenue, Suite 100
Solana Beach, CA 92075

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by ClearPoint Neuro, Inc., a Delaware corporation (the “Company”), of a Registration Statement on Form S-8 (the “Registration Statement”) under the Securities Act of 1933, as amended (the “Securities Act”), with the U.S. Securities and Exchange Commission (the “Commission”), covering 405,000 shares (the “Shares”) of the Company’s common stock, par value \$0.01 per share (the “Common Stock”), reserved for issuance under (a) the Non-Qualified Stock Option Agreement, dated November 17, 2017, by and between the Company and Joseph M. Burnett and (b) the Non-Qualified Stock Option Agreement, dated September 29, 2020, by and between the Company and Danilo D’Alessandro (together, the “Inducement Awards”).

This opinion (this “Opinion”) is being furnished in accordance with the requirements of Item 8 of Form S-8 and Item 601(b)(5)(i) of Regulation S-K.

In connection with this Opinion, we have reviewed and relied upon the Registration Statement, the Company’s Amended and Restated Certificate of Incorporation, as amended, as in effect on the date hereof (the “Certificate of Incorporation”), the Company’s Fourth Amended and Restated Bylaws, as in effect on the date hereof (the “Bylaws” and together with the Certificate of Incorporation, the “Charter Documents”), the resolutions adopted by the Company’s board of directors with respect to the Inducement Awards, and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this Opinion.

With respect to the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to the original of all documents submitted to us as certified or reproduced copies. We have also assumed that the Shares will be uncertificated in accordance with Section 158 of the Delaware General Corporation Law, and that the transfer agent therefor will register the purchaser thereof as the registered owner of any uncertificated Shares on its stock transfer books and records. We have further assumed that (a) the shares of Common Stock currently reserved for issuance under the Inducement Awards will remain available for the issuance of the Shares, and (b) neither the Charter Documents nor any of the resolutions adopted by the Company’s board of directors with respect to the Inducement Awards will be amended or otherwise modified prior to the issuance of the Shares. We have also obtained from officers of the Company certificates or comparable documents as to certain factual matters and, insofar as this Opinion is based on matters of fact, we have relied on such certificates and comparable documents without independent investigation. We have made such other investigations as we have deemed relevant and necessary in connection with the opinions hereinafter set forth.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that, if, as and when the Shares are issued by the Company in accordance with the terms of the Inducement Awards and payment in full of the consideration therefor is received by the Company, the Shares will be legally and validly issued, fully paid and nonassessable.

We consent to the filing of this Opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

We express no opinion as to matters governed by any laws other than the Delaware General Corporation Law and reported decisions of the Delaware courts interpreting such law.

This Opinion is rendered as of the date first written above, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares, the Inducement Awards, or the Registration Statement.

Respectfully Submitted,

/s/ Sheppard, Mullin, Richter & Hampton LLP
SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

Consent of Independent Registered Public Accounting Firm

ClearPoint Neuro, Inc.
Solana Beach, California

We consent to the incorporation by reference in this Registration Statement on Form S-8 of ClearPoint Neuro, Inc. (the "Company") of our report dated February 26, 2025, related to the consolidated financial statements of the Company as of and for the years ended December 31, 2024 and 2023.

/s/ Cherry Bekaert LLP

Tampa, Florida
February 9, 2026

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

ClearPoint Neuro, Inc.
Solana Beach, California

We consent to the incorporation by reference in this Registration Statement on Form S-8 of ClearPoint Neuro, Inc. of our report dated February 3, 2026, relating to the consolidated financial statements of IRRAS Holdings, Inc. as of and for the year ended December 31, 2024.

/s/ Cherry Bekaert LLP
Tampa, Florida
February 9, 2026

Calculation of Filing Fee Table

FORM S-8
(Form Type)**ClearPoint Neuro, 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⁾	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.01 per share	Other	405,000 ⁽²⁾	\$3.11 ⁽³⁾	\$1,259,550 ⁽³⁾	\$0.0001381	\$173.94
Total Offering Amounts							\$173.94
Total Fees Previously Paid							—
Total Fee Offsets							—
Net Fee Due							\$173.94

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement shall also cover an indeterminate number of additional shares of common stock, \$0.01 par value per share (the “Common Stock”), of ClearPoint Neuro, Inc. (the “Company”), which become issuable under (i) the Non-Qualified Stock Option Agreement, dated September 29, 2020, by and between the Company and Danilo D’Alessandro or (ii) the Non-Qualified Stock Option Agreement, dated November 7, 2017, by and between the Company and Joseph Michael Burnett, by reason of any stock splits, stock dividends, reorganizations, mergers, consolidations, recapitalizations or other similar transactions.
- (2) Represents 405,000 shares of Common Stock to be issued upon the exercise of outstanding stock options.
- (3) The proposed maximum offering price per share and maximum aggregate offering price are based upon the weighted average exercise price of the outstanding options, which is estimated solely for the purposes of calculating the registration fee under Rule 457(h) under the Securities Act.