

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

Post-Effective Amendment No. 2
to

FORM S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Freenome, Inc.

(Exact name of registrant as specified in its charter)

Delaware	6770	98-1783595
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code)	(I.R.S employer identification no.)

Genesis Marina, 3300 Marina Blvd,
Brisbane, CA 94005
Telephone: (650) 405-4770

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

Copies to:

Jocelyn M. Arel
Sarah Ashfaq
Justin Anslow
Katherine Hand

Goodwin Procter LLP
100 Northern Avenue
Boston, Massachusetts 02210
Telephone: (617) 570-1000

Approximate date of commencement of proposed sale to the public: From time to time after the Registration Statement became effective.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, 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, 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(d) 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. ☐

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. ☐

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

☐ Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)	☐ Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)
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This post-effective amendment No. 2 to registration statement shall hereinafter become effective in accordance with Section 8(c) of the Securities Act of 1933, as amended, or on such date as the Commission, acting pursuant to said Section 8(c), may determine.

EXPLANATORY NOTE

This Post-Effective Amendment No. 2 (this “Amendment No. 2”) to the Registration Statement on Form S-4 (File No. 333-295377) of Freenome, Inc. (the “Registration Statement”) is being filed as an exhibits-only filing. Accordingly, this Amendment No. 2 consists only of the facing page, this explanatory note, Part II of the Registration Statement, the signature page to the Registration Statement, and the filed exhibit. The remainder of the Registration Statement is unchanged and has therefore been omitted.

INFORMATION NOT REQUIRED IN DOCUMENT

Item 20. Indemnification of Officers And Directors

Subsection (a) of Section 145 of the DGCL empowers a corporation to indemnify any person who was or is a party or who 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.

Subsection (b) of Section 145 empowers a corporation to 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 acted in any of the capacities set forth above, 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, 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.

Section 145 further provides that to the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, 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; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the 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 his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Additionally, our certificate of incorporation limits the liability of our directors and officers to the fullest extent permitted by the DGCL, and our bylaws provide that we will indemnify them to the fullest extent permitted by such law. We have entered into and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. Under the terms of such indemnification agreements, we are required to indemnify each of our directors and officers, to the fullest extent permitted by the laws of the state of Delaware, if the basis of the indemnitee's involvement was by reason of the fact that the indemnitee is or was our director or officer or was serving at our request in an official capacity for another entity. We must indemnify our officers and directors against all direct and indirect costs, fees and expenses of any type or nature whatsoever, including all other disbursements, obligations or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be witness in, settlement or appeal of, or otherwise participating in any threatened, pending or completed action, suit, claim, counterclaim, cross claim, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding. The indemnification agreements also require us to advance, to the extent not prohibited by law, all direct and indirect costs, fees and expenses that such director or officer incurred, provided that such person will return any such advance if it is ultimately determined that such person is not entitled to indemnification by us. Any claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Item 21. Exhibits And Financial Statement Schedules

Exhibit No.	Description of Document
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<u>3.1*</u>	Certificate of Freenome, Inc.
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<u>3.2*</u>	Bylaws of Freenome, Inc.
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<u>5.1*</u>	Opinion of Goodwin Procter LLP
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<u>23.1</u>	Consent of WithumSmith+Brown, PC.
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<u>23.2*</u>	Consent of Independent Registered Public Accounting Firm.
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<u>23.3*</u>	Consent of Goodwin Procter LLP (included in Exhibit 5.1).
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101.INS	Inline XBRL Instance Document.
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101.SCH	Inline XBRL Taxonomy Extension Schema Document.
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101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
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101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
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101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
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101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
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104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).
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*Previously filed as an exhibit on July 23, 2026.

Item 22. Undertakings

1. The undersigned Registrant hereby undertakes:

(a) 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 this 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 this 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% 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 this Registration Statement or any material change to such information in this Registration Statement;
- (b) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment that contains a form of prospectus 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) 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.
- (d) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. 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 first use, 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 date of first use.
- (e) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

2. 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 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 of 1933 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 them is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
3. The undersigned registrant hereby undertakes as follows: that prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other Items of the applicable form.
4. The registrant undertakes that every prospectus: (1) that is filed pursuant to the immediately preceding paragraph, or (2) that purports to meet the requirements of Section 10(a)(3) of the Act and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes 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.
5. The undersigned Registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Item 4, 10(b), 11 or 13 of this Form S-4, within one business day of receipt of such request, and to send the incorporated documents by first Class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of this Registration Statement through the date of responding to the request.
6. The undersigned Registrant hereby undertakes to supply by means of a post-effective amendment all information concerning this transaction that was not the subject of and included in this Registration Statement when it became effective.

SIGNATURES

Pursuant to the requirements of the Securities Act, as amended, the registrant has duly caused this Post-Effective Amendment No. 2 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Brisbane, California, on the 28th day of July, 2026.

Date: July 28, 2026

Freenome, Inc.

By: /s/ Aaron Elliott

Name: Aaron Elliott, Ph.D.

Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Post-Effective Amendment No. 2 to the Registration Statement has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Aaron Elliott</u> Aaron Elliott, Ph.D.	Chief Executive Officer (Principal Executive Officer)	July 28, 2026
<u>/s/ Linh H. Le</u> Linh H. Le	Chief Financial Officer (Principal Financial and Principal Accounting Officer)	July 28, 2026
<u>*</u> Ann Costello	Director	July 28, 2026
<u>*</u> Carole Nuechterlein	Director	July 28, 2026
<u>*</u> Deepika Pakianathan	Director	July 28, 2026
<u>*</u> Randal Scott	Director	July 28, 2026
<u>*</u> Peter Kolchinsky	Director	July 28, 2026
<u>*</u> Douglas VanOort	Director	July 28, 2026

By: /s/ Aaron Elliott
Name: Aaron Elliott
Title: Attorney-in-Fact

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement on Post-Effective Amendment No. 1 to Form S-4 of our report dated March 12, 2026, which contains an explanatory paragraph relating to substantial doubt about the ability of the Perceptive Capital Solutions Corp's to continue as a going concern, relating to the financial statements of Perceptive Capital Solutions Corp as of December 31, 2025 and 2024 and for the year ended December 31, 2025 and for the period from March 22, 2024 (inception) through December 31, 2024.

/s/ WithumSmith+Brown, PC

New York, New York
July 23, 2026
