As filed with the Securities and Exchange Commission on August 5, 2026

Registration No. 333-297903

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

Amendment No. 1
to
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Quince Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**90-1024039** **(I.R.S. Employer Identification No.)**

611 Gateway Boulevard, Suite 273
South San Francisco, CA 94080
(415) 910-5717
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Dirk Thye
Chief Executive Officer
Quince Therapeutics, Inc.
611 Gateway Boulevard, Suite 273
South San Francisco, CA 94080
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Madison A. Jones
Ariel Rom
Rama Padmanabhan
Rita Sobral
Cooley LLP
1299 Pennsylvania Avenue, NW, Suite 700
Washington, DC 20004
(202) 842-7800

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

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, as amended, 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 earliest 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, 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. (Check one):

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 that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Quince Therapeutics, Inc. (the "Company") is filing this Amendment No. 1 to its registration statement on Form S-3 (File No. 333-297903) (the "Registration Statement") for the sole purpose of filing Exhibit 5.1. Accordingly, this Amendment No. 1 consists solely of the cover page, this explanatory note, Part II of the Registration Statement, Exhibit 5.1 and the signature pages. The remainder of the Registration Statement is unchanged and therefore has not been included in this Amendment No. 1 filing.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The expenses payable by us in connection with the issuance and distribution of the securities being registered hereunder on Form S-3 (other than underwriting discounts and commissions, if any) are set forth below. The Selling Stockholders will not bear any portion of such expenses. Each item listed is estimated, except for the SEC registration fee:

SEC registration fee	$ 38,600
Printing expenses	100,000
Legal fees and expenses	300,000
Accounting fees and expenses	50,000
Transfer agent	10,000
Total	$ 498,600

Item 15. Indemnification of Officers and Directors

We have entered into indemnification agreements with each of our current directors and executive officers. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. We also intend to enter into indemnification agreements with our future directors and executive officers.

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent of the registrant. The Delaware General Corporation Law provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Our amended and restated bylaws provide for indemnification by the registrant of its directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (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) for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions, or (iv) for any transaction from which the director derived an improper personal benefit. Our amended and restated certificate of incorporation provides for such limitation of liability.

We maintain standard policies of insurance under which coverage is provided (a) to our directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, and (b) to us with respect to payments we may make to our officers and directors pursuant to the above indemnification provision or otherwise as a matter of law.

Item 16. Exhibits

Exhibit Number	Description
2.1†**	Agreement and Plan of Merger, dated May 17, 2026, by and among Quince Therapeutics, Inc., Phoenix Merger Sub I, Inc., Phoenix Merger Sub II, LLC, Orphai Therapeutics, LLC, and Orphai Holdings Therapeutics, Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on May 18, 2026).
4.1**	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on May 13, 2019).
4.2**	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Quince Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on August 1, 2022).
4.3**	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Quince Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on April 9, 2026).
4.4**	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Quince Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on June 26, 2026).
4.5**	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on August 1, 2022).
4.6**	Amendment to Amended and Restated Bylaws (incorporated by reference to Exhibit 3.4 to the Registrant's Annual Report on Form 10-K (File No. 001-38890), filed with the SEC on April 10, 2026).
4.7**	Certificate of Designation of Series C Non-Voting Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on May 18, 2026).
4.8**	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on June 13, 2025).
4.9**	Form of Common Warrant (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on June 13, 2025).
4.10**	Form of Warrant to Purchase Series C Non-Voting Convertible Preferred Stock or Common Stock (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on May 18, 2026).
4.11**	Form of Registration Rights Agreement, dated June 12, 2025, by and among Quince Therapeutics, Inc. and each of the several purchasers signatory thereto (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on June 13, 2025.
4.12†**	Form of Registration Rights Agreement, by and among Quince Therapeutics, Inc. and certain investors signatory thereto (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K (File No. 001-38890), filed with the SEC on May 18, 2026).
5.1*	Opinion of Cooley LLP.
23.1**	Consent of BDO USA, P.C., independent registered public accounting firm for Quince Therapeutics, Inc.

Exhibit Number	Description
23.2**	Consent of Deloitte & Touche LLP, independent registered public accounting firm for Orphai Therapeutics, LLC
23.3*	Consent of Cooley LLP (included in Exhibit 5.1).
24.1**	Power of Attorney (including on signature page of this Registration Statement)
107**	Filing Fee Table.

† Certain schedules, annexes and attachments have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Registrant agrees to furnish supplementally a copy of any omitted schedule, annex or attachment to the SEC upon request.
* Filed herewith.
** Previously Filed.

Item 17. 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;

(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 "Filing 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 subparagraphs (i), (ii), and (iii) 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 the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the 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, 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) 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 Section 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, 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 Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in South San Francisco, California, on August 5, 2026.

QUINCE THERAPEUTICS, INC.

By: /s/ Dirk Thye, M.D.
Dirk Thye, M.D.
Chief Executive Officer and
Chief Medical Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Dirk Thye and Brendan Hannah, as his or her true and lawful attorneys-in-fact, proxies and agents, each with full power of substitution and resubstitution, for him or her in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought), and to file the same, with all exhibits thereto and other documents in connection therewith, with the SEC and generally to do all such things in his or her name and behalf in his or her capacity as officers and directors to enable the Company to comply with the provisions of the Securities Act and all requirements of the SEC, granting unto said attorneys-in-fact, proxies 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 for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, proxies and agents, or their or his or her 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.

Signature	Title	Date
/s/ Dirk Thye, M.D. Dirk Thye, M.D.	Chief Executive Officer, Chief Medical Officer and Director (Principal Executive Officer)	August 5, 2026
* Brendan Hannah	Chief Business Officer and Chief Operating Officer (*Principal Financial Officer and Principal Accounting Officer*)	August 5, 2026
* David A. Lamond	Director	August 5, 2026
* June Bray	Director	August 5, 2026
* Brigette Roberts, M.D.	Chief of Corporate Affairs and Director	August 5, 2026
* Christopher J. Senner	Director	August 5, 2026

*By: /s/ Dirk Thye, M.D.
Dirk Thye, M.D.
Attorney-in-fact

Cooley

Madison A. Jones
+(202) 728 7087
madison.jones@cooley.com

August 5, 2026

Quince Therapeutics, Inc.
611 Gateway Boulevard, Suite 273
South San Francisco, California 94080

Ladies and Gentlemen:

We have acted as counsel to Quince Therapeutics, Inc., a Delaware corporation (the "***Company***"), in connection with the filing of a Registration Statement on Form S-3 (the "***Registration Statement***") with the Securities and Exchange Commission (the "***Commission***") under the Securities Act of 1933, as amended (the "***Securities Act***"), including a related prospectus included in the Registration Statement (the "***Prospectus***"), covering the registration for resale of up to 15,470,099 shares (the "***Shares***") of the Company's common stock, par value $0.001 per share ("***Common Stock***"), consisting of up to (i) 162,971 outstanding shares of Common Stock (the "***Acquisition Shares***"), (ii) 3,489,281 shares of Common Stock (the "***Acquisition Conversion Shares***") issuable upon conversion of 67,101.235 outstanding shares ("***Acquisition Preferred Shares***") of the Company's Series C Non-Voting Convertible Preferred Stock, par value $0.001 per share ("***Series C Preferred Stock***"), (iii) 570,169 shares of Common Stock (the "***Acquisition Warrant Shares***") issuable upon exercise of outstanding warrants (the "***Acquisition Warrants***") (or, if such Acquisition Warrants are exercised for Series C Preferred Stock, the shares of Common Stock issuable upon conversion of such shares of Series C Preferred Stock), (iv) 7,498,447 shares of Common Stock (the "***PIPE Conversion Shares***") issuable upon conversion of 144,200.633 outstanding shares of the Company's Series C Preferred Stock (the "***PIPE Preferred Shares***"), and (v) 3,749,231 shares of Common Stock (the "***PIPE Warrant Shares***") issuable upon exercise of outstanding warrants (the "***PIPE Warrants***") (or, if such PIPE Warrants are exercised for Series C Preferred Stock, the shares of Common Stock issuable upon conversion of such shares of Series C Preferred Stock). The Acquisition Warrant Shares and the PIPE Warrant Shares are referred to herein collectively as the "***Warrant Shares***"), and the Acquisition Warrants and the PIPE Warrants are referred to herein collectively as the "***Warrants***". The Acquisition Shares, the Acquisition Preferred Shares and the Acquisition Warrants were issued by the Company pursuant to that certain Agreement and Plan of Merger, dated May 17, 2026 (the "***Merger Agreement***"), by and among the Company, Phoenix Merger Sub I, Inc., Phoenix Merger Sub II, LLC, Orphai Therapeutics, LLC and Orphai Holdings Therapeutics, Inc. The PIPE Preferred Shares and the PIPE Warrants were issued by the Company pursuant to that certain Securities Purchase Agreement, dated May 18, 2026 (the "***Purchase Agreement***"), among the Company and the purchasers named therein.

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Company's certificate of incorporation and bylaws, each as currently in effect, the Merger Agreement, the Purchase Agreement, the form of the Warrants, and 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 anti-fraud law, rule or regulation relating to securities or to the sale or issuance thereof.

With respect to the Acquisition Conversion Shares, the PIPE Conversion Shares and 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 or other matters cause the Preferred Shares to be convertible into, or the Warrants to be exercisable for, more shares of Common Stock than the number available for issuance by the Company, or that the consideration paid upon exercise of the Warrants is below the par value per share of the Common Stock or the Series C Preferred Stock, as applicable.

On the basis of the foregoing, in reliance thereon and subject to the assumption, exceptions, limitations and qualifications set forth herein, we are of the opinion that (a) the Acquisition Shares are validly issued, fully paid and nonassessable, (b) the Acquisition Conversion Shares and the PIPE Conversion Shares, when issued upon conversion of the Acquisition Preferred Shares and the PIPE Preferred Shares, respectively, in accordance with the terms of the Series C Preferred Stock, will be validly issued, fully paid and nonassessable, and (c) the Acquisition Warrant Shares and the PIPE Warrant Shares, when issued and paid for in accordance with the terms of the Warrants and converted in accordance with the terms of the Series C Preferred Stock, will be validly issued, fully paid and nonassessable.

Our 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 letter to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

We hereby consent to the reference to our firm under the caption "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to the Registration Statement. In giving such consents, 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/ Madison A. Jones
Madison A. Jones