UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT **UNDER THE SECURITIES ACT OF 1933**

PRELUDE THERAPEUTICS INCORPORATED

(Exact name of Registrant as specified in its charter) 81-1384762 **Delaware** (State or other jurisdiction of (I.R.S. Employer incorporation or organization) Identification Number) 175 Innovation Boulevard 19805 Wilmington, Delaware (Address of Principal Executive Offices) (Zip Code)

> 2020 Equity Incentive Plan 2020 Employee Stock Purchase Plan

(Full title of the plans)

Krishna Vaddi, Ph.D. **Chief Executive Officer Prelude Therapeutics Incorporated** 175 Innovation Boulevard Wilmington, Delaware 19805

(Name and address of agent for service)

(302) 467-1280

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

emerging growth company. See the definition of "large acc	elerated fi	iler", "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	\boxtimes	Smaller reporting company	\times
		Emerging growth company	\boxtimes
If an emerging growth company, indicate by check mark if or revised financial accounting standards provided pursuan	C	rant has elected not to use the extended transition period for complying with an on $7(a)(2)(B)$ of the Securities Act. \square	y new

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

REGISTRATION OF ADDITIONAL SHARES PURSUANT TO GENERAL INSTRUCTION E

Prelude Therapeutics Incorporated (the "*Registrant*") is filing this Registration Statement with the Securities and Exchange Commission (the "*Commission*") to register (a) 2,745,712 additional shares of common stock available for issuance under the Registrant's 2020 Equity Incentive Plan ("*2020 EIP*"), pursuant to the provision of the 2020 EIP providing for an annual 5% automatic increase in the number of shares reserved for issuance and (b) 549,142 additional shares of common stock available for issuance under the Registrant's 2020 Employee Stock Purchase Plan ("*ESPP*"), pursuant to the provision of the 2020 ESPP providing for an annual 1% automatic increase in the number of shares reserved for issuance.

In accordance with General Instruction E of Form S-8, and only with respect to the common stock issuable under the 2020 EIP and 2020 ESPP, this Registration Statement hereby incorporates by reference the contents of the Registrant's Registration Statement on Form S-8 filed with the Commission on September 25, 2020 (Registration No. 333-249032), March 16, 2021 (Registration No. 333-254349), March 17, 2022 (Registration No. 333-263642) and March 15, 2023 (File No. 333-270549) to the extent not superseded hereby.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act") are incorporated herein by reference:

- (a) the Registrant's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the Commission on February 15, 2024 pursuant to Section 13 of the Exchange Act;
- (b) all other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the Registrant's Annual Report on Form 10-K referred to in (a) above; and
- (c) the description of the Registrant's common stock contained in the Registrant's registration statement on Form 8-A (File No. 001-39527) filed on September 16, 2020 under Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the filing of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which 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, except that information furnished to the Commission under Item 2.02 or Item 7.01 in Current Reports on Form 8-K and any exhibit relating to such information, shall not be deemed to be incorporated by reference in 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 contained in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement.

Item 8. Exhibits.

The following exhibits are filed herewith:

Exhibit	Incorporated by Reference					Filed
Number	Exhibit Description	<u>Form</u>	File No.	<u>Exhibit</u>	Filing Date	Herewith
5.1	Opinion of Fenwick & West LLP					X
23.1	Consent of Fenwick & West LLP (contained in Exhibit 5.1)					X
23.2	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm					X
24.1	Power of Attorney (included on the signature page to this Registration Statement)					X
99.1	2020 Equity Incentive Plan and forms of award agreements thereunder	S-1/A	333-248628	10.3	9/21/2020	
99.2	2020 Employee Stock Purchase Plan and forms of award agreements thereunder	S-1/A	333-248628	10.4	9/21/2020	
107	<u>Filing Fee Table</u>					X

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-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Wilmington, State of Delaware, on this 15th day of February, 2024.

PRELUDE THERAPEUTICS INCORPORATED

By: /s/ Krishna Vaddi
Krishna Vaddi
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Krishna Vaddi and Laurent Chardonnet, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-infact and agent 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 might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute, 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 date indicated.

Name	Title	Date
/s/ Krishna Vaddi Krishna Vaddi, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	February 15, 2024
/s/ Laurent Chardonnet Laurent Chardonnet	Chief Financial Officer (Principal Financial and Accounting Officer)	February 15, 2024
/s/ Paul A. Friedman Paul A. Friedman, M.D.	Director	February 15, 2024
/s/ Martin Babler Martin Babler	Director	February 15, 2024
/s/ Julian Baker Julian Baker	Director	February 15, 2024
/s/ David Bonita David Bonita, M.D.	Director	February 15, 2024
/s/ Mardi C. Dier Mardi C. Dier	Director	February 15, 2024
/s/ Victor Sandor Victor Sandor, M.D.C.M.	Director	February 15, 2024



206.389.4510 Fenwick.com



EXHIBIT 5.1

February 15, 2024

Prelude Therapeutics Incorporated 175 Innovation Boulevard Wilmington, Delaware 19805

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

As counsel to Prelude Therapeutics Incorporated, a Delaware corporation (the "Company"), we have examined the Registration Statement on Form S-8 (the "Registration Statement") to be filed by the Company with the Securities and Exchange Commission (the "Commission") on or about February 15, 2024, in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), of an aggregate of 3,294,854 shares (the "Shares") of the Company's Common Stock, \$0.0001 par value per share (the "Common Stock"), subject to issuance by the Company (a) upon exercise or settlement of awards granted or to be granted under the Company's 2020 Equity Incentive Plan (the "2020 Plan") and (b) pursuant to purchase rights to acquire shares of Common Stock granted or to be granted under the Company's 2020 Employee Stock Purchase Plan (the "ESPP", and together with the 2020 Plan, the "Plans").

As to matters of fact relevant to the opinions rendered herein, we have examined such documents, certificates and other instruments which we have deemed necessary or advisable, including a certificate addressed to us and dated the date hereof executed by the Company. We have not undertaken any independent investigation to verify the accuracy of any such information, representations or warranties or to determine the existence or absence of any fact, and no inference as to our knowledge of the existence or absence of any fact should be drawn from our representation of the Company or the rendering of the opinion set forth below. We have not considered parol evidence in connection with any of the agreements or instruments reviewed by us in connection with this letter.

In our examination of documents for purposes of this letter, we have assumed, and express no opinion as to, the genuineness and authenticity of all signatures on original documents, the authenticity and completeness of all documents submitted to us as originals, that each document is what it purports to be, the conformity to originals of all documents submitted to us as copies or facsimile copies, the absence of any termination, modification or waiver of or amendment to any document reviewed by us (other than as has been disclosed to us), the legal competence or capacity of all persons or entities (other than the Company) executing the same and (other than the Company) the due authorization, execution and delivery of all documents by each party thereto. We have also assumed the conformity of the documents

filed with the Commission via the Electronic Data Gathering, Analysis and Retrieval System ("**EDGAR**"), except for required EDGAR formatting changes, to physical copies submitted for our examination.

The opinions in this letter are limited to the existing General Corporation Law of the State of Delaware now in effect. We express no opinion with respect to any other laws.

Based upon, and subject to, the foregoing, it is our opinion that the Shares, when issued and sold by the Company in accordance with the terms (including, without limitation, payment and authorization provisions) of the applicable Plan and the applicable form of award agreement thereunder, against the Company's receipt of payment therefor (in an amount and type of consideration not less than the par value per Share), and duly registered on the books of the transfer agent and registrar for the Shares in the name or on behalf of the holders thereof, will be validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us, if any, in the Registration Statement, the prospectuses constituting a part thereof and any amendments thereto. We do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

This opinion is intended solely for your use in connection with the issuance and sale of the Shares subject to the Registration Statement and is not to be relied upon for any other purpose. In providing this letter, we are opining only as to the specific legal issues expressly set forth above, and no opinion shall be inferred as to any other matter or matters. This opinion is rendered on, and speaks only as of, the date of this letter first written above, and does not address any potential change in facts or law that may occur after the date of this opinion letter. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention, whether or not such occurrence would affect or modify any of the opinions expressed herein.

Very truly yours,

/s/Fenwick & West LLP

FENWICK & WEST LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2020 Equity Incentive Plan and to the 2020 Employee Stock Purchase Plan of Prelude Therapeutics Incorporated of our report dated February 15, 2024, with respect to the financial statements of Prelude Therapeutics Incorporated included in its Annual Report (Form 10-K) for the year ended December 31, 2023, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania February 15, 2024

Calculation Of Filing Fee Tables Form S-8

Prelude Therapeutics Incorporated (Exact Name of Registrant as specified in its Charter)

Newly Registered Securities

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, par value \$0.0001 per share	Rule 457(c) and Rule 457(h)	2,745,712 ⁽²⁾	\$2.83 ⁽³⁾	\$7,770,364.96	0.00014760	\$1,146.91
Equity	Common stock, par value \$0.0001 per share	Rule 457(c) and Rule 457(h)	549,142 ⁽⁴⁾	\$2.41 ⁽⁵⁾	\$1,323,432.22	0.00014760	\$195.34
	Total Offering A	Amounts					\$1,342.25
Total Fee Offsets ⁽⁶⁾						-	
Net Fee Due						\$1,342.25	

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock that becomes issuable pursuant to the provisions of the Registrant's 2020 Equity Incentive Plan ("2020 EIP") and 2020 Employee Stock Purchase Plan ("2020 ESPP") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the Registrant's receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of common stock.
- (2) Represents additional shares of Common Stock to be registered and available for grant under the 2020 EIP resulting from the annual 5% automatic increase in the number of authorized shares available for issuance under the 2020 EIP.
- (3) Estimated in accordance with Rules 457(c) and 457(h) of the Securities Act solely for the purpose of calculating the registration fee. The proposed maximum offering price per share of \$2.83 was computed by averaging the high and low prices of a share of Registrant's common stock as reported on The Nasdaq Stock Market LLC on February 8, 2024.
- (4) Represents additional shares to be registered and available for grant under the 2020 ESPP resulting from the annual 1% automatic increase in the number of authorized shares available for issuance under the 2020 ESPP.
- (5) Estimated in accordance with Rules 457(c) and 457(h) of the Securities Act solely for the purpose of calculating the registration fee. The proposed maximum offering price per share of \$2.41 was computed by averaging the high and low prices of a share of Registrant's common stock as reported on The Nasdaq Stock Market LLC on February 8, 2024, multiplied by 85%, which is the percentage of the trading price per share applicable to purchasers under the 2020 ESPP.
- (6) The Registrant does not have any fee offsets.