UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT Under The Securities Act of 1933

TALARIS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

83-2377352 (I.R.S. Employer Identification No.)

570 S. Preston St
Louisville, KY 40202
(502) 398-9250
(Address, including zip code and telephone number, including area code, of Registrant's principal executive offices)

Talaris Therapeutics, Inc. 2021 Stock Option and Incentive Plan Talaris Therapeutics, Inc. 2021 Employee Stock Purchase Plan (Full title of the plans)

> Scott Requadt President and Chief Executive Officer 570 S. Preston St Louisville, KY 40202 (502) 398-9250

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Arthur R. McGivern, Esq. Sarah Ashfaq, Esq. Gabriela Morales-Rivera, Esq. Goodwin Procter LLP 100 Northern Avenue Boston, Massachusetts 02210 (617) 570-1000

3	hether the registrant is a large accelerated filer, an accelerated filer, a non-acce y. See the definitions of "large accelerated filer," "accelerated filer," "smaller r of the Exchange Act.	, ,	1 5	
Large accelerated filer		Accelerated filer		
Non-accelerated filer		Smaller reporting company	\boxtimes	
		Emerging growth company	\boxtimes	
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. \Box				

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

This Registration Statement on Form S-8 is being filed for the purpose of registering (i) an additional 2,072,569 shares of common stock, par value \$0.0001 per share ("Common Stock"), of Talaris Therapeutics, Inc. (the "Registrant") to be issued under the Registrant's 2021 Stock Option and Incentive Plan (the "2021 Plan") and (ii) an additional 414,513 shares of Common Stock of the Registrant to be issued under the Registrant's 2021 Employee Stock Purchase Plan (the "2021 ESPP"), for which a Registration Statement on Form S-8 (File No. 333-255835) relating to the same employee benefit plans is effective.

These additional shares are of the same class as other securities relating to the 2021 Plan and 2021 ESPP for which the Registrant's Registration Statement on Form S-8 (File No. 333-255835) filed with the Securities and Exchange Commission (the "Commission") on May 6, 2021 is effective.

Pursuant to General Instruction E to Form S-8, the contents of the Registration Statement on Form S-8 (File No. 333-255835) filed with the Commission on May 6, 2021 is incorporated by reference except to the extent supplemented, amended or superseded by the information set forth herein. Only those items of Form S-8 containing new information not contained in the earlier registration statement is presented herein.

Part II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The exhibits to this Registration Statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

EXHIBIT INDEX

Exhibit No.	Description
4.1	Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K (File No. 001-40384) filed on May 11, 2021).
4.2	Second Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Form 8-K (File No. 001-40384) filed on May 11, 2021).
4.3	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to our Registration Statement on Form S-1/A (File No. 333-255316) filed with the SEC on May 3, 2021).
4.4	Amended and Restated Investors' Rights Agreement among the Registrant and certain of its stockholders, effective as of September 22, 2020 (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-1 (File No. 333-255316) filed on April 16, 2021).
5.1*	Opinion of Goodwin Procter LLP.
23.1*	Consent of Deloitte & Touche LLP, independent registered public accounting firm.
23.2*	Consent of Goodwin Procter LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (included on signature page).
99.1	2021 Stock Option and Incentive Plan and form of award agreements thereunder (incorporated by reference to Exhibit 10.2 to our Registration Statement on Form S-1/A (File No. 333-255316) filed with the SEC on May 3, 2021).
99.2	2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.3 to our Registration Statement on Form S-1/A (File No. 333-255316) filed with the SEC on May 3, 2021).
107*	<u>Filing Fee Table.</u>

 ^{*} Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Louisville, State of Kentucky, on this 17th day of March, 2022.

TALARIS THERAPEUTICS, INC.

By: /s/ Scott Requadt

Name: Scott Requadt

Title: President, Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

KNOW ALL BY THESE PRESENT, that each individual whose signature appears below hereby constitutes and appoints each of Scott Requadt and Mary Kay Fenton as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, 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 all documents in connection therewith, with the Securities and Exchange Commission granting unto each said 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, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following person in the capacities and on the date indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
/s/ Scott Requadt	President and Chief Executive Officer	March 17, 2022
Scott Requadt	(Principal Executive Officer)	
/s/ Mary Kay Fenton	Chief Financial Officer	March 17, 2022
Mary Kay Fenton	(Principal Accounting Officer and Principal Financial Officer)	
/s/ Francois Nader	Director, Chairperson	March 17, 2022
Francois Nader		
/s/ Sandip Agarwala	Director	March 17, 2022
Sandip Agarwala		
/s/ Nicholas G. Galakatos	Director	March 17, 2022
Nicholas G. Galakatos, PhD		
/s/ Suzanne T. Ildstad	Director	March 17, 2022
Suzanne T. Ildstad, MD		
/s/ Geoff MacKay	Director	March 17, 2022
Geoff MacKay		
/s/ Mark D. McDade	Director	March 17, 2022
Mark D. McDade		
/s/ Gaurav D. Shah	Director	March 17, 2022
Gaurav D. Shah, MD		
/s/ Sapna Srivastava	Director	March 17, 2022
Sapna Srivastava, PhD	<u>—</u>	

March 17, 2022

Talaris Therapeutics, Inc. 570 S. Preston St. Louisville, KY 40202

Re: Securities Being Registered under Registration Statement on Form S-8

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 2,487,082 shares (the "Shares") of Common Stock, \$0.0001 par value per share ("Common Stock"), of Talaris Therapeutics, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2021 Stock Option and Incentive Plan and 2021 Employee Stock Purchase Plan (collectively, the "Plans").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

For purposes of the opinion set forth below, we have assumed that no event occurs that causes the number of authorized shares of Common Stock available for issuance by the Company to be less than the number of then unissued Shares.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Plans, will be validly issued, fully paid and nonassessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not 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 thereunder.

Very truly yours,

/S/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 17, 2022, relating to the consolidated financial statements of Talaris Therapeutics, Inc. appearing in the Annual Report on Form 10-K of Talaris Therapeutics, Inc. for the year ended December 31, 2021.

/s/ DELOITTE & TOUCHE LLP

Boston, Massachusetts March 17, 2022

Calculation of Filing Fee Table

Form S-8 (Form Type)

Talaris Therapeutics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount to be Registered(1)	Proposed Maximum Offering Price per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, \$0.0001	Rule 457(c) and					
	par value per share	Rule 457(h)	2,072,569 (2)	\$7.50 (3)	\$15,544,267.50	\$0.0000927	\$1,440.96
Equity	Common Stock, \$0.0001	Rule 457(c) and					
	par value per share	Rule 457(h)	414,513 (4)	\$6.38 (5)	\$2,644,592.94	\$0.0000927	\$245.16
Total Offering Amounts					\$18,188,860.44		_
Total Fees Previously Paid						_	
Total Fee Offsets						_	
Net Fee Due							\$1,686.12

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of common stock of Talaris Therapeutics, Inc. (the "Registrant"), par value \$0.0001 per share (the "Common Stock") that become issuable under the Registrant's 2021 Stock Option and Incentive Plan (the "2021 Plan") and the Registrant's 2021 Employee Stock Purchase Plan (the "2021 ESPP") by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of common stock.
- (2) Represents 2,072,569 additional shares of Common Stock authorized for issuance under the 2021 Plan, effective as of January 1, 2022, pursuant to an "evergreen" provision contained in the 2021 Plan. Pursuant to such provision, an additional number of shares will automatically be added to the shares authorized for issuance under the 2021 Plan on January 1 of each year.
- Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act. The price per share and aggregate offering price are calculated on the basis of \$7.50, the average of the high and low prices of the registrant's Common Stock as reported on the Nasdaq Global Market on March 14, 2022.
- (4) Represents 414,513 additional shares of Common Stock authorized for issuance under the 2021 ESPP, effective as of January 1, 2022 pursuant to an "evergreen" provision in the 2021 ESPP. Pursuant to such provision, an additional number of shares will automatically be added to the shares authorized for issuance under the 2021 ESPP on January 1 of each year.
- (5) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act. The price per share and aggregate offering price are calculated on the basis of \$6.38 per share, which is 85% of the average of the high and low prices of the common shares as reported on the Nasdaq Global Market on March 14, 2022. Pursuant to the 2021 ESPP, the purchase price of the common shares reserved for issuance thereunder will be 85% of the fair market value of a common share on the first trading day of the offering period or on the exercise date, whichever is less.