UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Tourmaline Bio, Inc.

(Exact name of registrant as specified in its charter)

83-2377352
(I.R.S. Employer Identification No.)
10010
(Zip Code)

2022 Equity Incentive Plan 2023 Equity Incentive Plan 2023 Employee Stock Purchase Plan (Full titles of the plans)

Sandeep Kulkarni Chief Executive Officer 27 West 24th Street, Suite 702 New York, NY 10010 (646) 481-9832

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

Copies to:

Divakar Gupta, Esq. Brandon Fenn, Esq. Katherine Denby, Esq. Cooley LLP 55 Hudson Yards New York, NY 10001 (212) 479-6000 Brad Middlekauff Chief Business Officer and General Counsel 27 West 24th Street, Suite 702 New York, NY 10010 (646) 481-9832

	y. See the definitions of "large accele	ated filer," "accelerated filer," "smaller reporting company," and "emerging growth	111
Large accelerated filer		Accelerated Filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	\boxtimes
		Emerging growth company	\boxtimes
If an emerging growth co	mpany, 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

EXPLANATORY NOTE

Pursuant to the Agreement and Plan of Merger, dated June 22, 2023 (the "Merger Agreement"), by and among Talaris Therapeutics, Inc. ("Talaris"), Terrain Merger Sub, Inc., a wholly owned subsidiary of Talaris ("Merger Sub"), and Tourmaline Bio, Inc. ("Private Tourmaline"), Merger Sub merged with and into Private Tourmaline, with Private Tourmaline surviving the merger as a wholly owned subsidiary of Talaris (the "Merger") on October 19, 2023 (the "Closing Date"). On the Closing Date, Talaris changed its name to "Tourmaline Bio, Inc." (the "Registrant").

In accordance with the Merger Agreement, upon the effective time of the Merger (the "Effective Time"), each outstanding stock option to purchase shares of Private Tourmaline common stock (each a "Private Tourmaline Option") originally granted under Private Tourmaline's 2022 Equity Incentive Plan (the "2022 Plan") was assumed by the Registrant and was converted into, and became, a stock option to purchase shares of common stock of the Registrant and the Registrant assumed the 2022 Plan.

The Registrant is filing this Registration Statement on Form S-8 for the purpose of registering: (i) 1,403,408 shares of common stock under the 2022 Plan; (ii) 2,033,677 shares of common stock under the Registrant's 2023 Equity Incentive Plan; and (iii) 203,367 shares of common stock under the Registrant's 2023 Employee Stock Purchase Plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

ITEM 1. PLAN INFORMATION.

Not required to be filed with this Registration Statement.

ITEM 2. REGISTRANT INFORMATION AND EMPLOYEE PLAN ANNUAL INFORMATION.

Not required to be filed with this Registration Statement.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The Registrant hereby incorporates by reference into this Registration Statement the following documents previously filed by the Registrant with the Securities and Exchange Commission ("SEC"):

- (a) Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 31, 2023;
- (b) Quarterly Reports on Form 10-Q for the periods ended March 31, 2023 and June 30, 2023, filed with the SEC on May 15, 2023 and August 14, 2023, respectively;
- (c) Current Reports on Form 8-K, which were filed with the SEC on <u>February 16, 2023, April 14, 2023, May 30, 2023, June 14, 2023, June 22, 2023, October 6, 2023, October 10, 2023, October 18, 2023 and October 20, 2023; and</u>
- (d) the description of the Registrant's common stock in the Registrant's registration statement on Form 8-A filed with the SEC on May 4, 2021, including any amendments or reports filed for the purpose of updating such description, including Exhibit 4.3 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

All documents, reports and definitive proxy or information statements filed pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), after the date 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 of such documents; provided, however, that documents, reports and definitive proxy or information statements, or portions thereof, which are furnished and not filed in accordance with the rules of the SEC shall not be deemed incorporated by reference into this Registration Statement. Any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes that 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.

Section 145 of the General Corporation Law of the State of Delaware ("DGCL") empowers a Delaware corporation to indemnify any persons who are, or are threatened to be made, parties to any threatened, pending, or completed legal action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was an officer or director of such corporation, or is or was serving at the request of such corporation as a director, officer, employee, or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit, or proceeding, provided that such officer or director acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests, and, for criminal proceedings, had no reasonable cause to believe his conduct was illegal. A Delaware corporation may indemnify officers and directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation in the performance of his duty. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which such officer or director actually and reasonably incurred.

Our amended and restated certificate of incorporation, as amended ("charter"), and our amended and restated bylaws ("bylaws") provide that we will have the power to indemnify, to the extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, our directors, officers, employees and other agents against expenses and liabilities incurred in legal proceedings. The bylaws also provide that the right of directors and officers to indemnification shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the certificate of incorporation, bylaw, agreement, vote or consent of stockholders or disinterested directors or otherwise. The bylaws also permit us to secure insurance on behalf of any officer, director, employee, or other agent for the Registrant or another corporation, partnership, joint venture, trust or other enterprise or non-profit entity against any expense, liability or loss, whether or not the Registrant would have the power to indemnify such person against such expense, liability or loss under the DGCL.

Section 102(b)(7) of the DGCL provides that directors and officers shall not be personally liable for monetary damages for breaches of their fiduciary duty as directors or officers, as applicable, except for (i) breaches of their duty of loyalty to us or our stockholders, (ii) acts or omissions not in good faith or which involve intentional misconduct or knowing violations of law, (iii) with respect to a director, certain transactions under Section 174 of the DGCL (unlawful payment of dividends or unlawful stock purchases or redemptions), and with respect to an officer, from any action by or in the right of the corporation, or (iv) transactions from which a director or an officer derives an improper personal benefit. Our charter includes such a provision. The effect of this provision is to eliminate the personal liability of directors and officers for monetary damages or actions involving a breach of their fiduciary duty of care, including any actions involving gross negligence.

In addition, we have entered into indemnification agreements with our directors and officers that require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service, so long as the indemnitee acted in good faith and in a manner the indemnitee reasonably believed to be in or not opposed to the best interests of us, and, with respect to any criminal action or proceeding, the indemnitee had no reasonable cause to believe his or her conduct was unlawful. We also maintain director and officer liability insurance to insure our directors and officers against the cost of defense, settlement or payment of a judgment under specified circumstances.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

Exhibit <u>Number</u>	<u>Description</u>
4.1	Third 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. 001-40384), filed with the SEC on May 11, 2021).
4.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-40384), filed with the SEC on October 20, 2023).
4.3	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-40384), filed with the SEC on October 20, 2023).
4.4	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.3 to the Registrant's Current Report on Form 8-K (File No. 001-40384), filed with the SEC on October 20, 2023).
4.5	Second Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-40384), filed with the SEC on May 11, 2021).
5.1	Opinion of Cooley LLP.
23.1	Consent of Deloitte & Touche LLP, independent registered public accounting firm of Tourmaline Bio, Inc.
23.2	Consent of Deloitte & Touche LLP, independent registered public accounting firm of Talaris Therapeutics, Inc.
23.3	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1	Power of Attorney. Reference is made to the signature page hereto.

- 99.1 Tourmaline Bio, Inc. 2022 Equity Incentive Plan and Form of Stock Option Agreement thereunder (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-4, filed with the SEC on July 19, 2023).
- 99.2 Tourmaline Bio, Inc. 2023 Equity Incentive Plan (incorporated by reference to Exhibit 10.7 to the Registrant's Current Report on Form 8-K (File No. 001-40384), filed with the SEC on October 20, 2023).
- 99.3 Forms of Option Grant Notice, Option Agreement and Notice of Exercise under Tourmaline Bio, Inc. 2023 Equity Incentive Plan
 (incorporated by reference to Exhibit 10.8 to the Registrant's Current Report on Form 8-K (File No. 001-40384), filed with the SEC on
 October 20, 2023).
- 99.4 Forms of Restricted Stock Unit Grant Notice and Award Agreement under Tourmaline Bio, Inc. 2023 Equity Incentive Plan (incorporated by reference to Exhibit 10.9 to the Registrant's Current Report on Form 8-K (File No. 001-40384), filed with the SEC on October 20, 2023).
- 99.5 Tourmaline Bio, Inc. 2023 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.10 to the Registrant's Current Report on Form 8-K (File No. 001-40384), filed with the SEC on October 20, 2023).
- 107 <u>Filing Fee Table.</u>

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, as amended (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 a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table 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 Registration Statement is on Form S-8, and 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; and

- (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 herein, 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.
- (b) The undersigned Registrant hereby undertakes 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 herein, 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 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 New York, State of New York, on October 20, 2023.

TOURMALINE BIO, INC.

By: /s/ Sandeep Kulkarni
Sandeep Kulkarni
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Sandeep Kulkarni and Brad Middlekauff, and each of them, as true and lawful attorneys-in-fact and agents, with full powers of substitution and resubstitution, for them and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in their names and behalf in their capacities as officers and directors to enable Tourmaline Bio, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, granting unto said attorneys-in-fact 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 to all intents and purposes as he might or could do in person, ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

Signature	ire Title	
/s/ Sandeep Kulkarni Sandeep Kulkarni	Chief Executive Officer and Director (Principal Executive Officer)	October 20, 2023
/s/ Ryan Robinson Ryan Robinson	Interim Chief Financial Officer, Vice President, Finance and Controller (Principal Financial and Accounting Officer)	October 20, 2023
/s/ Caley Castelein Caley Castelein	Director	October 20, 2023
/s/ Cariad Chester Cariad Chester	Director	October 20, 2023
/s/ Aaron Kantoff Aaron Kantoff	Director	October 20, 2023
/s/ Mark D. McDade Mark D. McDade	Director	October 20, 2023

/s/ Sapna Srivastava	Director	October 20, 2023
Sapna Srivastava		,
/s/ Parvinder Thiara	Director	October 20, 2023
Parvinder Thiara		



Brandon Fenn T: +1 212 479 6626 bfenn@cooley.com

October 20, 2023

Tourmaline Bio, Inc. 27 West 24th Street, Suite 702 New York, NY 10010

Ladies and Gentlemen:

We have acted as counsel to Tourmaline Bio, Inc. (formerly known as Talaris Therapeutics, Inc.), a Delaware corporation (the "Company"), in connection with the filing of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission (the "Commission"), covering the offering of up to 3,640,452 shares (the "Shares") of the Company's common stock, \$0.0001 par value per share ("Common Stock"), consisting of (a) 2,033,677 shares issuable pursuant to the Company's 2023 Equity Incentive Plan (the "2023 Plan"), (b) 1,403,408 shares issuable pursuant to the Company's 2023 Employee Stock Purchase Plan (the "2023 ESPP"), and (c) 203,367 shares issuable pursuant to options granted under the Tourmaline Bio, Inc. 2022 Equity Incentive Plan, as amended (the "2022 Plan", together with the 2023 Plan and the 2023 ESPP, the "Plans"), which 2022 Plan and options outstanding thereunder were assumed by the Company pursuant to that certain Agreement and Plan of Merger, dated June 22, 2023 (the "Merger Agreement"), by and among the Company, Tourmaline Bio, Inc., a Delaware corporation and wholly-owned subsidiary of the Company (now known as Tourmaline Sub, Inc.), and Terrain Merger Sub, Inc., a Delaware corporation.

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related prospectuses, (b) the Company's certificate of incorporation and bylaws, each as currently in effect, (c) the Merger Agreement, (d) the Plans, and (e) originals, or copies certified to our satisfaction, of such other records, documents, certificates, memoranda and other 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 by the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. 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 securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plans, the Registration Statement and related prospectuses, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

Cooley LLP 55 Hudson Yards New York, New York 10001-2157 t: (212) 479-6000 f: (212) 479-6275 cooley.com



October 20, 2023 Page Two

This opinion is limited to the matters expressly set forth in this letter, and no opinion 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 undertake 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 consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Commission thereunder.

Sincerely,	
Cooley LLP	
By: /s/ Brandon Fenn	
Brandon Fenn	

Cooley LLP 55 Hudson Yards New York, New York 10001-2157 t: (212) 479-6000 f: (212) 479-6275 cooley.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Tourmaline Bio, Inc. (formerly Talaris Therapeutics, Inc.) on Form S-8 of our report dated June 9, 2023, relating to the financial statements of Tourmaline Bio, Inc. (now known as Tourmaline Sub, Inc.), appearing in the definitive proxy statement filed by Talaris Therapeutics, Inc. with the Securities and Exchange Commission on September 15, 2023 which is incorporated by reference in the Form 8-K dated October 20, 2023 which is incorporated by reference in this Registration Statement.

/s/ Deloitte & Touche LLP

Morristown, New Jersey October 19, 2023

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 31, 2023, 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, 2022.

/s/ DELOITTE & TOUCHE LLP

Boston, Massachusetts October 20, 2023

CALCULATION OF FILING FEE TABLE

Form S-8

Tourmaline Bio, Inc. Table 1 – Newly Registered Securities

				Proposed Maximum			
	Security Class	Fee Calculation	Amount	Offering Price Per	Maximum Aggregate		Amount of Registration
Security Type	Title	Rule	Registered(1)	Unit	Offering Price	Fee Rate	Fee
Equity	Common						
	Stock, par value						
	\$0.0001 per						
	share to be						
	issued						
	pursuant to						
	the						
	Tourmaline						
	Bio, Inc.						
	2022 Equity						
	Incentive	Rule	1,403,408				
	Plan	457(h)(1)	shares(2)	\$8.36(5)	\$11,732,490.88	0.0001476	\$1,731.72
Equity	Common						
	Stock, par						
	value						
	\$0.0001 per share to be						
	issued						
	pursuant to						
	the						
	Tourmaline						
	Bio, Inc.						
	2023 Equity	Rule					
	Incentive	457(c)	2,033,677				
	Plan	and (h)(1)	shares(3)	\$11.11(6)	\$22,594,151.47	0. 0001476	\$3,334.90
Equity	Common						
	Stock, par						
	value						
	\$0.0001 per						
	share to be						
	issued						
	pursuant to the						
	Tourmaline						
	Bio, Inc.						
	2023						
	Employee						
	Stock	Rule					
	Purchase	457(c)	203,367				
	Plan	and (h)(1)	shares(4)	\$9.45(7)	\$1,921,818.15	0. 0001476	\$283.67
Total Offering Amounts		3,640,452					
		shares		\$36,248,460.50		\$5,350.29	
	al Fee Offsets						\$0.00
N	et Fee Due						\$5,350.29

- (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 common stock of Tourmaline Bio, Inc. (formerly Talaris Therapeutics, Inc., the "Registrant"), par value \$0.0001 per share ("Common Stock"), that become issuable under the Registrant's 2022 Equity Incentive Plan, as amended (the "2022 Plan"), 2023 Equity Incentive Plan (the "2023 Plan") and 2023 Employee Stock Purchase Plan (the "2023 ESPP") by reason of any stock dividend, stock split, recapitalization or other similar transaction.
- (2) Represents shares of Common Stock reserved for issuance upon the exercise of outstanding stock options granted under the 2022 Plan.
- (3) Represents shares of Common Stock reserved for future grant under the 2023 Plan. The 2023 Plan provides that an additional number of shares will automatically be added annually to the shares authorized for issuance under the 2023 Plan on January 1 of each calendar year, from January 1, 2024 through (and including) January 1, 2033, in an amount equal to (a) 5% of the total number of shares of Common Stock of the Registrant issued and outstanding on December 31st of the preceding calendar year; or (b) a lesser number of shares of Common Stock determined by the registrant's board of directors (the "Board") prior to the date of increase.
- (4) Represents 203,367 shares of Common Stock reserved for future grant under the 2023 ESPP (the "Initial Share Reserve"). The 2023 ESPP provides that an additional number of shares will automatically be added to the shares authorized for issuance under the 2023 ESPP on January 1st of each calendar year, from January 1, 2024 through (and including) January 1, 2033, in an amount equal to the lesser of: (a) 1% of the total number of shares of Common Stock issued and outstanding on December 31st of the preceding calendar year; (b) a number of shares equal to three times the Initial Share Reserve, or 610,101 shares; or (c) such lesser number of shares of Common Stock as determined by the Board.

- (5) This estimate is made pursuant to Rule 457(h)(1) of the Securities Act solely for purposes of calculating the registration fee. The proposed maximum aggregate offering price for the 1,403,408 shares of Common Stock reserved for issuance upon the exercise of outstanding stock options granted under the 2022 Plan, as of the date of this Registration Statement, are calculated using the weighted-average exercise price of such stock options of \$8.36 per share.
- (6) This estimate is made pursuant to Rule 457(h)(1) and Rule 457(c) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price are based upon the average of the high and low prices of the Common Stock on October 20, 2023, as reported on The Nasdaq Stock Market, which date is within five business days prior to the filing of this Registration Statement.
- (7) This estimate is made pursuant to Rule 457(h)(1) and Rule 457(c) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price are based upon the average of the high and low prices of the Common Stock on October 20, 2023, as reported on The Nasdaq Stock Market, which date is within five business days prior to the filing of this Registration Statement, multiplied by 85%, which is the percentage of the trading price per share applicable to purchasers under the 2023 ESPP.