

**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)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**27 West 24<sup>th</sup> Street, Suite 702**  
**New York, NY**  
(Address of Principal Executive Offices)

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

**10010**  
(Zip Code)

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

**Sandeep Kulkarni**  
**Chief Executive Officer**  
**Tourmaline Bio, Inc.**  
**27 West 24<sup>th</sup> 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**  
**Tourmaline Bio, Inc.**  
**27 West 24<sup>th</sup> Street, Suite 702**  
**New York, NY 10010**  
**(646) 481-9832**

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.

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## REGISTRATION OF ADDITIONAL SHARES PURSUANT TO GENERAL INSTRUCTION E

Pursuant to General Instruction E of Form S-8, Tourmaline Bio, Inc. (the “*Registrant*”) is filing this Registration Statement with the Securities and Exchange Commission (the “*SEC*”) to register (i) 1,016,878 additional shares of its common stock, \$0.0001 par value per share (“*Common Stock*”), under the Registrant’s 2023 Equity Incentive Plan (the “2023 Plan”), pursuant to the provisions of the 2023 Plan providing for an automatic increase in the number of shares of Common Stock reserved and available for issuance under the 2023 Plan on January 1, 2024, and (ii) 203,375 additional shares of its Common Stock under the Registrant’s 2023 Employee Stock Purchase Plan (the “2023 ESPP” and, together with the 2022 Plan, the “*Plans*”), pursuant to the provisions of the 2023 ESPP providing for an automatic increase in the number of shares of Common Stock reserved and available for issuance under the 2023 ESPP on January 1, 2024. In accordance with the instructional note to Part I of Form S-8 as promulgated by the SEC, the information specified by Part I of the Form S-8 has been omitted from this Registration Statement.

The Registrant previously registered shares of its Common Stock for issuance under the Plans on a Registration Statement on Form S-8 filed with the SEC on October 20, 2023 (File No. 333-275131) (the “*Prior Registration Statement*”). Pursuant to General Instruction E to Form S-8, this Registration Statement hereby incorporates by reference the contents of the Prior Registration Statement except as set forth below.

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents filed by the Registrant with the SEC are incorporated by reference into this Registration Statement:

- (a) The Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on [March 19, 2024](#);
- (b) The Registrant’s Current Reports on Form 8-K, filed with the SEC on [January 8, 2024](#), [January 24, 2024](#) and [January 26, 2024](#);
- (c) The description of the Registrant’s Common Stock contained in Exhibit 4.2 to the Registrant’s Annual Report on Form 10-K, filed with the SEC on [March 19, 2024](#), for the fiscal year ended December 31, 2023; and
- (d) All documents, reports and definitive proxy or information statements filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended, (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents. 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 herein or in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

## ITEM 8. EXHIBITS

<b>Exhibit Number</b>	<b>Description</b>
4.1	<a href="#"><u>Third Amended and Restated Certificate of Incorporation of the Registrant, as amended through October 19, 2023 (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-40384), filed with the SEC on November 14, 2023).</u></a>
4.2	<a href="#"><u>Second Amended and Restated Bylaws 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 May 11, 2021).</u></a>
5.1*	<a href="#"><u>Opinion of Cooley LLP.</u></a>
23.1*	<a href="#"><u>Consent of Deloitte &amp; Touche LLP, independent registered public accounting firm of Tourmaline Bio, Inc.</u></a>
23.2*	<a href="#"><u>Consent of Cooley LLP. Reference is made to Exhibit 5.1.</u></a>
24.1*	<a href="#"><u>Power of Attorney. Reference is made to the signature page hereto.</u></a>
99.1	<a href="#"><u>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).</u></a>
99.2	<a href="#"><u>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).</u></a>
99.3	<a href="#"><u>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).</u></a>
99.4	<a href="#"><u>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).</u></a>
107*	<a href="#"><u>Filing Fee Table.</u></a>

\* Filed herewith.

## 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 March 19, 2024.

### 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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Sandeep Kulkarni</u> Sandeep Kulkarni	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	March 19, 2024
<u>/s/ Ryan Robinson</u> Ryan Robinson	Interim Chief Financial Officer, Vice President, Finance and Controller <i>(Principal Financial and Accounting Officer)</i>	March 19, 2024
<u>/s/ Clay Siegall, Ph.D.</u> Clay Siegall, Ph.D.	Chairman of the Board	March 19, 2024
<u>/s/ Caley Castelein, M.D.</u> Caley Castelein, M.D.	Director	March 19, 2024
<u>/s/ Aaron Kantoff</u> Aaron Kantoff	Director	March 19, 2024
<u>/s/ Mark McDade</u> Mark McDade	Director	March 19, 2024
<u>/s/ Sapna Srivastava, Ph.D.</u> Sapna Srivastava, Ph.D.	Director	March 19, 2024
<u>/s/ Parvinder Thiara</u> Parvinder Thiara	Director	March 19, 2024

**Calculation of Filing Fee Table**

**Form S-8**  
(Form Type)

**Tourmaline Bio, Inc.**  
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered <sup>(1)</sup>	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, Tourmaline Bio, Inc. 2023 Equity Incentive Plan	Other <sup>(2)</sup>	1,016,878 <sup>(4)</sup>	\$42.75 <sup>(2)</sup>	\$43,471,534.50	\$0.00014760	\$6,416.40
Equity	Common Stock, par value \$0.0001 per share, Tourmaline Bio, Inc. 2023 Employee Stock Purchase Plan	Other <sup>(3)</sup>	203,375 <sup>(5)</sup>	\$36.34 <sup>(3)</sup>	\$7,390,647.50	\$0.00014760	\$1,090.90
<b>Total Offering Amount</b>					\$50,862,182.00		\$7,507.30
<b>Total Fees Previously Paid</b>							\$ —
<b>Total Fee Offsets</b>							\$ —
<b>Net Fee Due</b>							\$7,507.30

(1) Pursuant to Rule 416(a) promulgated 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 become issuable under the Registrant’s 2023 Equity Incentive Plan (the “*2023 Plan*”) and the Registrant’s 2023 Employee Stock Purchase Plan (the “*2023 ESPP*”) by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of the Registrant’s common stock, as applicable.

(2) Estimated in accordance with Rule 457(c) and (h) of the Securities Act solely for the purpose of calculating the registration fee on the basis of the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Global Select Market on March 15, 2024.

(3) Estimated in accordance with Rule 457(c) and (h) of the Securities Act solely for the purpose of calculating the registration fee on the basis of the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Global Select Market on March 15, 2024, multiplied by 85%, which is the percentage of the price per share applicable to purchases under the 2023 ESPP.

(4) Represents an automatic increase equal to the lesser of (i) 5% of the total number of shares of the Registrant’s common stock issued and outstanding on December 31, 2023; and (ii) a lesser number of shares of the Registrant’s common stock determined by the Registrant’s board of directors (the “*Board*”) prior to the date of increase, in each case, which annual increase is provided by the 2023 Plan.

(5) Represents an automatic increase equal to the lesser of (i) 1% of the total number of shares of the Registrant’s common stock issued and outstanding on December 31, 2023; (ii) 610,101 shares; or (iii) such lesser number of shares of the Registrant’s common stock as determined by the Board prior to the date of increase, in each case, which annual increase is provided by the 2023 ESPP.



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

Exhibit 5.1

March 19, 2024

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., a Delaware corporation (the “**Company**”), in connection with the filing by the Company 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 1,220,253 shares (the “**Shares**”) of the Company’s common stock, par value \$0.0001 per share (“**Common Stock**”), consisting of (i) 1,016,878 shares of Common Stock that may be issued pursuant to the Company’s 2023 Equity Incentive Plan (the “**2023 Plan**”) and (ii) 203,375 shares of Common Stock that may be issued pursuant to the Company’s 2023 Employee Stock Purchase Plan (together with the 2023 Plan, the “**Plans**”).

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the related prospectuses, (b) the Company’s certificate of incorporation and the Company’s bylaws, each as currently in effect, (c) the Plans and (d) such other records, documents, opinions, 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 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 the related prospectuses, will be validly issued, fully paid and nonassessable (except as to shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

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 have no obligation or responsibility to update or supplement this opinion 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 that 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.

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



Tourmaline Bio, Inc.  
March 19, 2024  
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Sincerely,

Cooley LLP

By: /s/ Brandon Fenn  
Brandon Fenn

Cooley LLP 55 Hudson Yards, New York, NY 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 on Form S-8 of our report dated March 19, 2024 relating to the financial statements of Tourmaline Bio, Inc., appearing in the Annual Report on Form 10-K of Tourmaline Bio, Inc. for the year ended December 31, 2023.

/s/ Deloitte & Touche LLP

Morristown, NJ  
March 19, 2024