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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

SENTI BIOSCIENCES, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

2 Corporate Drive, First Floor
South San Francisco, CA 94080
Telephone: (650) 382-3281

86-2437900
(IRS Employer Identification No.)

Senti Biosciences, Inc. 2022 Equity Incentive Plan
Senti Biosciences, Inc. 2022 Employee Stock Purchase Plan

(Full title of the plans)

Timothy Lu, M.D., Ph.D.
Chief Executive Officer
Senti Biosciences, Inc.
2 Corporate Drive, First Floor
South San Francisco, CA 94080
Telephone: (650) 239-2030

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

Copies to:

Jocelyn M. Arel
Maggie Wong
Michael R. Patrone
Goodwin Procter LLP
620 Eighth Avenue
New York, NY 10018
(212) 813-8800

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

Non-accelerated filer

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.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed by Senti Biosciences, Inc. (the “Company”) to register 2,287,751 additional shares of common stock, par value \$0.0001 per share, reserved and available for issuance under the Senti Biosciences, Inc. 2022 Equity Incentive Plan (the “2022 Equity Incentive Plan”) and also to register 457,550 additional shares of common stock, par value \$0.0001 per share, reserved and available for issuance under the Senti Biosciences, Inc. 2022 Employee Stock Purchase Plan (the “2022 Employee Stock Purchase Plan”).

Pursuant to General Instruction E for Form S-8 regarding Registration of Additional Securities, the contents of the Registration Statement on Form S-8 File No. 333-266958 and File No. 333-269816, filed with the Securities and Exchange Commission on August 18, 2022 and February 16, 2023, respectively, are hereby incorporated by reference in this Registration Statement to the extent not replaced hereby.

PART II

Item 8. Exhibits.

EXHIBIT INDEX

Exhibit No.	Description
4.1	<u>Second Amended and Restated Certificate of Incorporation of the registrant (incorporated by reference from Exhibit 3.1 to the current report on Form 8-K, filed with the Commission on June 15, 2022).</u>
4.2	<u>Amended and Restated Bylaws of the registrant (incorporated by reference from Exhibit 3.2 to the current report on Form 8-K filed with the Commission on June 15, 2022).</u>
5.1*	<u>Opinion of Goodwin Procter LLP.</u>
23.1*	<u>Consent of KPMG LLP.</u>
23.2*	<u>Consent of Goodwin Procter LLP (included in Exhibit 5.1).</u>
24.1*	<u>Power of Attorney (included on signature page of this registration statement).</u>
99.1	<u>Senti Biosciences, Inc. 2022 Equity Incentive Plan and forms of award agreements thereunder (incorporated by reference to Exhibit 10.3 to the quarterly report on Form 10-Q, filed with the Commission on August 15, 2022).</u>
99.2	<u>Senti Biosciences, Inc. 2022 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.4 to the quarterly report on Form 10-Q, filed with the Commission on August 15, 2022).</u>
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 South San Francisco, CA on the 10th day of January, 2024.

SENTI BIOSCIENCES, INC.

By: /s/ Timothy Lu
Name: Timothy Lu, M.D., Ph.D.
Title: Chief Executive Officer and President (Principal Executive Officer)

POWER OF ATTORNEY AND SIGNATURES

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below hereby constitutes and appoints each of Timothy Lu and Deborah Knobelman 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 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 persons in the capacities and on the date indicated below.

Signature	Title	Date
<u>/s/ Timothy Lu</u> Timothy Lu, M.D., Ph.D.	Chief Executive Officer, President and Director (Principal Executive Officer)	January 10, 2024
<u>/s/ Deborah Knobelman</u> Deborah Knobelman, Ph.D.	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	January 10, 2024
<u>/s/ Susan Berland</u> Susan Berland	Director	January 10, 2024
<u>/s/ Brenda Cooperstone</u> Brenda Cooperstone, M.D.	Director	January 10, 2024
<u>/s/ Edward Mathers</u> Edward Mathers	Director	January 10, 2024
<u>/s/ James J. Collins</u> James J. (Jim) Collins, Ph.D.	Director	January 10, 2024
<u>/s/ Omid Farokhzad</u> Omid Farokhzad, M.D.	Director	January 10, 2024

Calculation of Filing Fee Tables
S-8
(Form Type)
Senti Biosciences, 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 ⁽¹⁾	Proposed Maximum Offering Price Per Unit ⁽²⁾	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common stock, par value \$0.0001 per share, under 2022 Employee Stock Purchase Plan	Rule 457(c) and Rule 457(h)	457,550 ⁽³⁾	\$ 0.62 ⁽²⁾	\$ 283,681.00	0.0001476	\$ 41.88
Equity	Common stock, par value \$0.0001 per share, under 2022 Equity Incentive Plan	Rule 457(c) and Rule 457(h)	2,287,751 ⁽⁴⁾	\$ 0.62	\$ 1,418,405.62	0.0001476	\$ 209.36
Total Offering Amounts			2,745,301		\$ 1,702,086.62		\$ 251.24
Total Fee Offsets							\$ —
Net Fees Due							\$ 251.24

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this registration statement also covers an indeterminate number of additional shares that may be issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Estimated pursuant to Rules 457(c) and 457(h) under the Securities Act, solely for the purposes of calculating the registration fee and based on the average of the high and low prices of the registrant’s common stock as reported on the Nasdaq Global Market on January 3, 2024, which date is within five business days prior to the filing of this registration statement.
- (3) Represents 457,550 shares of the registrant’s common stock currently reserved for future issuance under the 2022 Employee Stock Purchase Plan. The 2022 Employee Stock Purchase Plan contains an evergreen provision under which the number of authorized shares cumulatively increases, on January 1 of each year, in an amount equal to the lesser of (i) one percent (1%) of the total number of shares of common stock outstanding on December 31 of the preceding calendar year, and (ii) 1,000,000 shares of Company common stock. Unless the 2022 Employee Stock Purchase Plan is earlier amended or terminated, this evergreen provision increases shares over a ten year period, from January 1, 2023 through January 1, 2032.
- (4) Represents 2,287,751 shares of the Company’s common stock reserved for future issuance under the 2022 Equity Incentive Plan. The 2022 Equity Incentive Plan contains an evergreen provision under which the number of authorized shares cumulatively increases, on January 1 of each year, by 5% of the outstanding number of shares of common stock of the Company on the immediately preceding December 31, or such lesser number of shares as approved by the Board of Directors, based on the recommendations of the Compensation Committee of the Board of Directors. Unless the 2022 Equity Incentive Plan is earlier amended or terminated, this evergreen provision increases shares over a ten year period, from January 1, 2023 through January 1, 2032.



Goodwin Procter LLP
Three Embarcadero Center
San Francisco, CA 94111-4003
+1 (415) 733-6000

January 10, 2024

Senti Biosciences, Inc.
2 Corporate Drive, First Floor
South San Francisco, CA 94080

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 2,745,301 shares (the "Shares") of common stock, \$0.0001 par value per share ("Common Stock"), of Senti Biosciences, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2022 Equity Incentive Plan, and 2022 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.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 Business Lawyer 815 (Summer 2019).

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 use of our report dated March 22, 2023, with respect to the consolidated financial statements of Senti Biosciences, Inc. and its subsidiaries, incorporated herein by reference.

/s/ KPMG LLP

San Francisco, California
January 10, 2024