

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

AMENDMENT NO. 3
TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

SENTI BIOSCIENCES HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

42-1912154
(I.R.S. Employer
Identification No.)

**2 Corporate Drive, First Floor
South San Francisco, CA 94080
(650) 239-2030**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Timothy Lu, M.D., Ph.D.
Chief Executive Officer
Senti Biosciences Holdings, 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:

Kirt W. Shuldberg
Keith J. Scherer
Alexa Belonick

Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP
One Bush Plaza, Suite 1200
San Francisco, CA 94104
(858) 436-8000

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: ☐

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

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. ☒

The registrant (the "Registrant") hereby amends this registration statement, or this Registration Statement, on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Senti Biosciences Holdings, Inc. is filing this Amendment No. 3 (this “Amendment”) to the Registration Statement on Form S-3 (File No. 333-296917) as an exhibits-only filing to file an updated auditor consent as Exhibit 23.1. Accordingly, this Amendment consists only of the facing page, this explanatory note, Item 16 of Part II of the Registration Statement, the signature page to the Registration Statement and the filed Exhibit 23.1. The remainder of the Registration Statement is unchanged and has been omitted.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statements Schedules

(a) Exhibits.

Exhibit Number	Description	Schedule/Form	Incorporated by Reference		
			File No.	Exhibit	Filing Date
2.1 [^]	<u>Business Combination Agreement, dated as of December 19, 2021, by and among Dynamics Special Purpose Corp., Explore Merger Sub, Inc. and Senti Biosciences, Inc.</u>	S-4/A	333-262707	2.1	May 10, 2022
2.2 [^]	<u>Amendment No. 1 to Business Combination Agreement, dated as of February 12, 2022, by and among Dynamics Special Purpose Corp., Explore Merger Sub, Inc. and Senti Biosciences, Inc.</u>	S-4/A	333-262707	2.2	May 10, 2022
2.3 [^]	<u>Amendment No. 2 to Business Combination Agreement, dated as of May 19, 2022, by and among Dynamics Special Purpose Corp., Explore Merger Sub, Inc. and Senti Biosciences, Inc.</u>	8-K	001-40440	2.1	May 24, 2022
2.4 [^]	<u>Agreement and Plan of Merger, dated April 24, 2026, by and among Senti Biosciences, Inc., Senti Biosciences Holdings, Inc. and Senti Biosciences Merger Sub, Inc.</u>	8-K	001-40440	2.1	April 24, 2026
3.1	<u>Amended and Restated Certificate of Incorporation of Senti Biosciences Holdings, Inc.</u>	8-K	001-40440	3.1	April 24, 2026
3.2	<u>Amended and Restated Bylaws of Senti Biosciences Holdings, Inc.</u>	8-K	001-40440	3.2	April 24, 2026
3.3	<u>Certificate of Merger</u>	8-K	001-40440	3.3	April 24, 2026
3.4	<u>Amended and Restated Bylaws of Senti Biosciences, Inc.</u>	8-K	001-40440	3.2	June 15, 2022
4.1	<u>Specimen Common Stock Certificate</u>	8-K	001-40440	4.1	April 24, 2026
4.2	<u>Form of Senior Secured Convertible Note of Senti Holdings, Inc.</u>	8-K	001-40440	10.1	September 4, 2026
5.1	<u>Opinion of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP</u>	S-3	333-296917	5.1	September 10, 2026
10.1	<u>Securities Purchase Agreement, dated April 27, 2026, by and among Senti Biosciences Holdings, Inc., Senti Holdings, Inc., Senti Biosciences, Inc. and the purchaser named therein</u>	8-K	001-40440	10.1	May 1, 2026

Exhibit Number	Description	Schedule/Form	Incorporated by Reference		
			File No.	Exhibit	Filing Date
10.2	Form of Guarantee	8-K	001-40440	10.3	May 1, 2026
10.3	Form of Registration Rights Agreement by and among Senti Biosciences Holdings, Inc., Senti Biosciences, Inc. and any investor to be named therein	8-K	001-40440	10.4	May 1, 2026
10.4	Form of Voting Agreement by and among Senti Biosciences Holdings, Inc., Senti Biosciences, Inc. and the stockholders to be party thereto	8-K	001-40440	10.5	May 1, 2026
10.5	Amended and Restated Designation Agreement, dated as of April 24, 2026, by and among Senti Biosciences Holdings, Inc., Senti Biosciences, Inc. and Celadon Partners SPV 24	8-K	001-40440	10.1	April 24, 2026
10.6^	Agreement and Plan of Merger, dated as of July 14, 2026, by and among Senti Biosciences Holdings, Inc., Senti Holdings, Inc., Senti Biosciences, Inc., Celadon Partners SPV 35 Limited and Senti Merger Sub, Inc.	8-K	001-40440	2.1	July 15, 2026
10.7	Form of Contingent Value Rights Agreement	8-K	001-40440	10.1	July 15, 2026
10.8	Amendment No. 1 to Securities Purchase Agreement, dated September 1, 2026, by and among Senti Biosciences Holdings, Inc., Senti Holdings, Inc., Senti Biosciences, Inc. and the purchasers named therein	8-K	001-40440	10.1	September 2, 2026
10.9	Equity Commitment Letter, dated September 3, 2026, by and between Senti Biosciences Holdings, Inc. and CPIF II-9 Limited	8-K	001-40440	10.2	September 4, 2026
23.1*	Consent of KPMG LLP, Independent Registered Public Accounting Firm				
23.2	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP	S-3	333-296917	5.1	September 10, 2026
24.1	Power of Attorney	S-3	333-296917	24.1	June 18, 2026
99.1	Unaudited Pro Forma Condensed Consolidated Financial Information	S-3	333-296917	99.1	September 10, 2026
107	Filing Fee Table	S-3	333-296917	107	September 10, 2026

* Filed herewith.

^ Certain exhibits and schedules to this Exhibit have been omitted in accordance with Regulation S-K Item 601(b)(2). We agree to furnish supplementally a copy of all omitted exhibits and schedules to the Securities and Exchange Commission upon its request.

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 this Form S-3 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 September 22, 2026.

SENTI BIOSCIENCES HOLDINGS, INC.

By: /s/ Timothy Lu

Name: Timothy Lu, M.D., Ph.D.

Title: Chief Executive Officer

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 dates indicated.

Signature	Title	Date
* Timothy Lu, M.D., Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	September 22, 2026
* Jay Cross	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	September 22, 2026
* Bryan Baum	Director	September 22, 2026
* James (Jim) Collins, Ph.D.	Director	September 22, 2026
* Brenda Cooperstone, M.D.	Director	September 22, 2026
* Feng Hsiung	Director	September 22, 2026
* Edward Mathers	Director	September 22, 2026
* Frances D. Schulz	Director	September 22, 2026
* Donald Tang	Director	September 22, 2026

*: By: /s/ Timothy Lu, M.D., Ph.D.
Timothy Lu, M.D., Ph.D.
Attorney-in-Fact

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated March 27, 2026, with respect to the consolidated financial statements of Senti Biosciences, Inc. and subsidiaries, incorporated herein by reference, and to the reference to our firm under the heading “Experts” in the prospectus.

/s/ KPMG LLP

San Francisco, California
September 22, 2026