SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

Senti Biosciences, Inc.

(Name of Issuer)

Common Stock, par value $0.0001 per share

(Title of Class of Securities)

81726A100

(CUSIP Number)

Bayer HealthCare LLC
100 Bayer Boulevard,
Whippany, NJ, 07981
(862) 404-3000

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

03/10/2025

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. ☑

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

SCHEDULE 13D

CUSIP No. 81726A100

1	Name of reporting person Bayer HealthCare LLC
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☑ (b)

3	SEC use only	
4	Source of funds (See Instructions) OO	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) ☐	
6	Citizenship or place of organization DELAWARE	
Number of Shares Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 6,142,848.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 6,142,848.00
11	Aggregate amount beneficially owned by each reporting person 6,142,848.00	
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐	
13	Percent of class represented by amount in Row (11) 19.99 %	
14	Type of Reporting Person (See Instructions) CO	

Comment for Type of Reporting Person: (1) The amounts reported in rows 8, 10 and 11 herein include the number of shares of common stock, par value $0.0001 per share (the "Common Stock') of Senti Biosciences, Inc., a Delaware corporation (the "Issuer") that would be issuable upon exercise of the Warrant (defined below) in full, and do not give effect to the blocking provisions outlined in the terms of the Warrant (defined below). (2) Includes 2,980,691 shares of Issuer's Common Stock, underlying the Warrant (defined below) held by Bayer HealthCare LLC that is exercisable within 60 days of the date of this filing and gives effect to the blocking provision outlined in the term of the Warrant (defined below).

SCHEDULE 13D

CUSIP No. 81726A100

1	Name of reporting person Bayer US Holding LLC
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☑ (b)
3	SEC use only
4	Source of funds (See Instructions) OO
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) ☐

6	Citizenship or place of organization DELAWARE	
Number of Shares Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 6,142,848.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 6,142,848.00
11	Aggregate amount beneficially owned by each reporting person 6,142,848.00	
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐	
13	Percent of class represented by amount in Row (11) 19.99 %	
14	Type of Reporting Person (See Instructions) CO	

Comment for Type of Reporting Person: (1) The amounts reported in rows 8, 10 and 11 herein include the number of shares of the Issuer's Common Stock that would be issuable upon exercise of the Warrant (defined below) in full, and do not give effect to the blocking provisions outlined in the terms of the Warrant (defined below). (2) Includes 2,980,691 shares of Issuer's Common Stock, underlying the Warrant (defined below) held by Bayer HealthCare LLC that is exercisable within 60 days of the date of this filing and gives effect to the blocking provision outlined in the term of the Warrant (defined below).

SCHEDULE 13D

CUSIP No. 81726A100

1	Name of reporting person Sebastian Guth	
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☑ (b)	
3	SEC use only	
4	Source of funds (See Instructions) OO	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) ☐	
6	Citizenship or place of organization Unknown	
Number of Shares Beneficially Owned by Each Reporting	7	Sole Voting Power 0.00
	8	Shared Voting Power

Person With:		6,142,848.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 6,142,848.00

11	Aggregate amount beneficially owned by each reporting person 6,142,848.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐
13	Percent of class represented by amount in Row (11) 19.99 %
14	Type of Reporting Person (See Instructions) IN

Comment for Type of Reporting Person: (1) The amounts reported in rows 8, 10 and 11 herein include the number of shares of the Issuer's Common Stock that would be issuable upon exercise of the Warrant (defined below) in full, and do not give effect to the blocking provisions outlined in the terms of the Warrant (defined below). (2) Includes 2,980,691 shares of Issuer's Common Stock, underlying the Warrant (defined below) held by Bayer HealthCare LLC that is exercisable within 60 days of the date of this filing and gives effect to the blocking provision outlined in the term of the Warrant (defined below).

SCHEDULE 13D

CUSIP No. 81726A100

1	Name of reporting person Gurumurthy Ramamurthy
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☑ (b)
3	SEC use only
4	Source of funds (See Instructions) OO
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) ☐
6	Citizenship or place of organization Unknown

Number of Shares Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 6,142,848.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 6,142,848.00

11	Aggregate amount beneficially owned by each reporting person

	6,142,848.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐
13	Percent of class represented by amount in Row (11) 19.99 %
14	Type of Reporting Person (See Instructions) IN

Comment for Type of Reporting Person: (1) The amounts reported in rows 8, 10 and 11 herein include the number of shares of the Issuer's Common Stock that would be issuable upon exercise of the Warrant (defined below) in full, and do not give effect to the blocking provisions outlined in the terms of the Warrant (defined below). (2) Includes 2,980,691 shares of Issuer's Common Stock, underlying the Warrant (defined below) held by Bayer HealthCare LLC that is exercisable within 60 days of the date of this filing and gives effect to the blocking provision outlined in the term of the Warrant (defined below).

SCHEDULE 13D

Item 1.	Security and Issuer
(a)	Title of Class of Securities: Common Stock, par value $0.0001 per share
(b)	Name of Issuer: Senti Biosciences, Inc.
(c)	Address of Issuer's Principal Executive Offices: 2 Corporate Drive, First Floor, South San Francisco, CALIFORNIA , 94080.
Item 2.	Identity and Background
(a)	Bayer HealthCare LLC ("BHC"); Bayer US Holding LLC ("BUSH LLC"); Sebsatian Guth ("Guth") and Gurumurthy Ramamurthy ("Ramamurthy", together with Guth, the "Managers of BUSH LLC" and collectively, the Managers of BUSH LLC, along with BHC and BUSH LLC, the "Reporting Persons").
(b)	The business address for the Reporting Persons is 100 Bayer Boulevard, Whippany, New Jersey 07981
(c)	The principal business of the Reporting Persons is to invest in and assist growth-oriented business.
(d)	During the five years prior to the date hereof, none of the Reporting Persons has been convicted in a criminal proceeding or has been a party to a civil proceeding ending in a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
(e)	During the five years prior to the date hereof, none of the Reporting Persons has been convicted in a criminal proceeding or has been a party to a civil proceeding ending in a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
(f)	The Reporting Persons are citizens of: BHC - Delaware BUSH LLC - Delaware Guth - Unknown Ramamurthy - Unknown
Item 3.	Source and Amount of Funds or Other Consideration
	On December 2, 2024, the Reporting Persons and other unrelated investors entered into a Securities Purchase Agreement with the Issuer (the "Purchase Agreement"), pursuant to which the Reporting Persons purchased (i) 2,222 shares of the Issuer's Series A Preferred Stock (the "Series A") for an aggregate offering price of approximately $5.5 million and (ii) a warrant (the "Warrant") to purchase 3,333,000 shares of Issuer's Common Stock exercisable thereunder (the " Warrant Shares"). The Warrant has an exercise price per share of $2.30. The Warrant is exercisable at any time and from time to time on or after the Stockholder Approval (as defined below) until the five-year anniversary of the Warrant's issue date. BHC may not exercise the Warrant if BHC, together with its affiliates, would beneficially own more than 19.99% of the number of shares of the Common Stock outstanding immediately after giving effect to such exercise. BHC may increase or decrease this percentage not in excess of 45.00% by providing at least 61 days' prior notice to the Issuer. Subject to the terms and limitations contained in the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (the "Certificate of Designation") governing the Series A, the Series A will not become convertible until the Issuer's stockholders approve (i) the issuance of all Common Stock issuable upon conversion of the Series A and (ii) the issuance of the Warrant Shares upon exercise of the Warrant (collectively, the "Stockholder Approval"). On the first trading day following the announcement of the Stockholder Approval, the Issuer may, at its option, cause each share of Series A to

automatically convert into such number of shares of Common Stock, at the conversion price of $2.25 per share (the "Conversion Price"), subject to the terms and limitations contained in the Certificate of Designation. Additionally, subject to the terms and limitations in the Certificate of Designation, if the Issuer has not elected to automatically convert the Series A, then at the option of each individual holder of Series A, each share of the Series A held by such holder, not otherwise converted, shall be convertible into the applicable number of shares of Common Stock at the Conversion Price. On March 6, 2025, the Issuer's stockholders approved, among other things, subject to certain conditions, the issuance of the Issuer's outstanding Common Stock in accordance with Nasdaq Listing Rule 5635, upon (i) the conversion of the Series A pursuant to the terms of the Certificate of Designation and (ii) the exercise of Warrants and the underlying Warrant Shares at less than the "minimum price" under Nasdaq Listing Rule 5635(d), and each of (i) and (ii) which may be deemed a "change of control" under Nasdaq Listing Rule 5635(b), including the issuance of equity compensation to one of the Issuer's officers upon conversion of the Series A and the exercise of the Warrants to purchase Warrant Shares at less than market value under Nasdaq Listing Rule 5635(c). On March 10, 2025, following the Stockholder Approval, the Issuer exercised its option to automatically convert each share of Series A into 1,000 shares of Common Stock. Accordingly, BHC owns 2,809,848 shares of the Issuer's Common Stock. Further, BHC also has a right to exercise its Warrant to purchase 3,333,000 Warrant Shares but since the BHC's ownership as of the date of this filing is in excess of the 19.99% beneficial ownership limitation only a portion of the Warrant Shares, 2,980,148, are exercisable as of the date of this filing. The foregoing description is qualified in its entirety by the full text and form of the Certificate of Designation, the Warrant, and the Purchase Agreement, copies of which are filed herewith as Exhibits 7.03, 7.04 and 7.05, respectively. The source of the funds for the purchases by BHC described above was from available cash on hand.

Item 4. Purpose of Transaction

Other than as described above, and except that the Reporting Persons may, from time to time or at any time, subject to market conditions and other factors, purchase additional shares of Common Stock in the open market, in privately negotiated transactions or otherwise, or sell at any time all or a portion of the shares of Common Stock now owned or hereafter acquired by them to one or more purchasers, the Reporting Persons do not have any present plans which relate to or would result in: (a) the acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer; (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries; (c) a sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries; (d) any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board; (e) any material change in the present capitalization or dividend policy of the Issuer; (f) any other material change in the Issuer's business or corporate structure; (g) changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person; (h) causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Exchange Act; or j) any action similar to any of those actions enumerated above.

Item 5. Interest in Securities of the Issuer

(a) BHC - 19.99% BUSH LLC - 19.99% Guth - 19.99% Ramamurthy - 19.99% Each Reporting Person disclaims beneficial ownership of the shares other than those shares which such person owns of record. The percentage of outstanding Common Stock of the Issuer which may be deemed to be beneficially owned by each Reporting Person is set forth on Line 13 of such Reporting Person's cover sheet. Such percentage was calculated based on (a) 4,829,457 shares of Common Stock reported by the Issuer to be outstanding as of January 21, 2025, on the Issuer's Definitive Proxy Statement filed with the SEC on January 27, 2025 and (b) 21,157,000 shares of Common Stock issued in connection with the automatic conversion of the Series A sold pursuant to the Purchase Agreement.

(b) Regarding the number of shares as to which such person has: (i) sole power to vote or to direct the vote: See line 7 of cover sheets. (ii) shared power to vote or to direct the vote: See line 8 of cover sheets. (iii) sole power to dispose or to direct the disposition: See line 9 of cover sheets. (iv) shared power to dispose or to direct the disposition: See line 10 of cover sheets.

(c) Except for the agreements described above, none of the Reporting Persons or, to the knowledge of the Reporting Persons, has effected any transactions in the securities of the Issuer reported herein during the past 60 days.

(d) Except as described in this statement, no other person has the power to direct the receipt of dividends on or the proceeds of sales of, the shares of Common Stock owned by the Reporting Persons.

(e) N/A

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer

The information set forth in Items 3 and 4 of this Schedule 13D is incorporated herein by reference. Registration Rights Agreement On December 2, 2024, in connection with the execution of the Purchase Agreement, the Issuer entered into a Registration Rights Agreement (the "Registration Rights Agreement") with certain investors (collectively the "Holders"), including the Reporting Persons, pursuant to which the Issuer has agreed, subject to the terms and conditions of the agreement, to file a registration statement under the Securities Act of 1933, as amended, promptly and, in any event, no later than 120 days after the Closing Date (as defined under the Purchase Agreement) to register the resale of the shares of Common Stock beneficially owned by the Holders, including all shares of Common Stock held by the Reporting Persons, as well as the shares issuable upon exercise of the Warrant held by the Reporting Persons. The Registration Rights Agreement also includes customary provisions, including with respect to the payment of fees and expenses associated with the registration, as well as indemnification provisions. The foregoing description is qualified in its entirety by the full text and form of the Registration Rights Agreement, a copy of which is filed herewith as Exhibit 7.06 and incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

Exhibit 7.01 - Joint Filing Agreement by and among the Reporting Persons. Exhibit 7.02 - Power of Attorney regarding filings under the Securities Exchange Act of 1934, as amended. Exhibit 7.03 - Certificate of Designation of Preferences, Rights and Limitations of the Series A Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Issuer's Current Report on Form 8-K (File No.001-40440), filed on December 2, 2024). Exhibit 7.04 - Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.1 to the Issuer's Current Report on Form 8-K (File No.001-40440), filed on December 2, 2024). Exhibit 7.05 - Form of Securities Purchase Agreement, dated December 2, 2024, by and among Senti Biosciences, Inc. and the purchasers named therein (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K (File No.001-40440), filed on December 2, 2024). Exhibit 7.06 - Registration Rights Agreement (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K (File No.001-40440), filed on December 2, 2024).

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Bayer HealthCare LLC

Signature: /s/ Priyal Patel
Name/Title: Priyal Patel, Treasurer
Date: 03/17/2025

Bayer US Holding LLC

Signature: /s/ Priyal Patel
Name/Title: Priyal Patel, Treasurer
Date: 03/17/2025

Sebastian Guth

Signature: /s/ Sebastian Guth
Name/Title: Sebastian Guth
Date: 03/17/2025

Gurumurthy Ramamurthy

Signature: /s/ Gurumurthy Ramamurthy
Name/Title: Gurumurthy Ramamurthy
Date: 03/17/2025

Exhibit 7.01

JOINT FILING AGREEMENT

Joint Filing Agreement, dated as of March 17, 2025, is by and among the signatories below.

Each of the signatories below may be required to file with the United States Securities and Exchange Commission a statement on Schedule 13D with respect to shares of Common Stock, par value $0.0001 per share, of Senti Biosciences, Inc., beneficially owned by it from time to time. Pursuant to and in accordance with Rule 13(d)(1)(k) promulgated under the Securities Exchange Act of 1934, as amended, each of the signatories below hereby agree to be responsible for the timely filing of the Schedule 13D and any amendments thereto on behalf of the signatories below, and for the completeness and accuracy of the information concerning itself contained therein. Each of the signatories below hereby further agree to file this Joint Filing Agreement as an exhibit to the statement and each such amendment, as required by such rule.

This Joint Filing Agreement may be terminated by any of the signatories below upon one week's prior written notice or such lesser period of notice as the signatories below may mutually agree.

Executed and delivered as of the date first above written.

Date: March 17, 2025

BAYER HEALTHCARE LLC

By: /s/ Priyal Patel
Priyal Patel, Treasurer

BAYER US HOLDING LLC

By: /s/ Priyal Patel
Priyal Patel, Treasurer

Exhibit 7.02

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Nicholas Massey with full power to act singly, his true and lawful attorney-in-fact, with full power of substitution, to:

(i) sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of himself as an individual or in his capacity as a general partner of any partnership or limited liability company, pursuant to Section 13 or 16 of the Securities Exchange Act of 1934, as amended, and any and all regulations promulgated thereunder

(ii) file the same (including any amendments thereto), with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and any stock exchange or similar authority and

(iii) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this power of attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate.

Each of the undersigned hereby grant to the attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted.

This power of attorney shall remain in full force and effect until revoked by the undersigned in a signed writing delivered to the attorney-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 17th day of March**,** 2025.

BAYER HEALTHCARE LLC

By: /s/ Priyal Patel
Priyal Patel, Treasurer

BAYER US HOLDINGS LLC

By: /s/ Priyal Patel
Priyal Patel, Treasurer

/s/ Sebastian Guth
Sebastian Guth

/s/ Gurumurthy Ramamurthy
Gurumurthy Ramamurthy