SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Lyra Therapeutics, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

55234L204

(CUSIP Number)

12/31/2025

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

☐ Rule 13d-1(b)
☑ Rule 13d-1(c)
☐ Rule 13d-1(d)

SCHEDULE 13G

CUSIP No. 55234L204

1	Names of Reporting Persons SABBY MANAGEMENT, LLC	
2	Check the appropriate box if a member of a Group (see instructions) ☐ (a) ☑ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization DELAWARE	
Number of Shares	5	Sole Voting Power

Beneficially Owned by Each Reporting Person With:		0.00
	6	Shared Voting Power 175,158.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 175,158.00

9	Aggregate Amount Beneficially Owned by Each Reporting Person 175,158.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐
11	Percent of class represented by amount in row (9) 9.9 %
12	Type of Reporting Person (See Instructions) CO

SCHEDULE 13G

CUSIP No. 55234L204

1	Names of Reporting Persons Hal Mintz
2	Check the appropriate box if a member of a Group (see instructions) ☐ (a) ☑ (b)
3	Sec Use Only
4	Citizenship or Place of Organization FLORIDA

Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 175,158.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 175,158.00

9	Aggregate Amount Beneficially Owned by Each Reporting Person 175,158.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐
11	Percent of class represented by amount in row (9)

11	9.9 %
12	Type of Reporting Person (See Instructions) IN

SCHEDULE 13G

CUSIP No. 55234L204

1	Names of Reporting Persons Sabby Volatility Warrant Master Fund, Ltd.		
2	Check the appropriate box if a member of a Group (see instructions) ☐ (a) ☑ (b)		
3	Sec Use Only		
4	Citizenship or Place of Organization CAYMAN ISLANDS		
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00	
	6	Shared Voting Power 175,158.00	
	7	Sole Dispositive Power 0.00	
	8	Shared Dispositive Power 175,158.00	
9	Aggregate Amount Beneficially Owned by Each Reporting Person 175,158.00		
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐		
11	Percent of class represented by amount in row (9) 9.9 %		
12	Type of Reporting Person (See Instructions) CO		

SCHEDULE 13G

Item 1.

(a) Name of issuer:

Lyra Therapeutics, Inc.

(b) Address of issuer's principal executive offices:

480 ARSENAL WAY, WATERTOWN, MASSACHUSETTS, 02472

Item 2.

(a) Name of person filing:

Sabby Volatility Warrant Master Fund, Ltd. Sabby Management, LLC Hal Mintz

Address or principal business office or, if none, residence:

(b) Sabby Volatility Warrant Master Fund, Ltd. c/o Captiva (Cayman) Ltd Governors Square, Bldg 4, 2nd Floor 23 Lime Tree Bay Avenue P.O. Box 32315 Grand Cayman KY1-1209 Cayman Islands Sabby Management, LLC 1011 Links Dr. Miami Beach, FL 33109 Hal Mintz c/o Sabby Management, LLC 1011 LInks Dr. Miami Beach, FL 33109

Citizenship:

(c) Sabby Volatility Warrant Master Fund, Ltd. - Cayman Islands Sabby Management, LLC - Delaware, USA Hal Mintz - USA

Title of class of securities:

(d) Common Stock

CUSIP No.:

(e) 55234L204

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

(a) ☐ Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);

(b) ☐ Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);

(c) ☐ Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);

(d) ☐ Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);

(e) ☐ An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);

(f) ☐ An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);

(g) ☐ A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);

(h) ☐ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);

(i) ☐ A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);

(j) ☐ A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

(k) ☐ Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).

Item 4. Ownership

Amount beneficially owned:

(a) Sabby Volatility Warrant Master Fund, Ltd. - 175,158 Sabby Management, LLC - 175,158 Hal Mintz - 175,158

Percent of class:

(b) Sabby Volatility Warrant Master Fund, Ltd. - 9.87% Sabby Management, LLC - 9.87% Hal Mintz - 9.87% %

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

0

(ii) Shared power to vote or to direct the vote:

175,158

(iii) Sole power to dispose or to direct the disposition of:

0

(iv) Shared power to dispose or to direct the disposition of:

175,158

Item 5. Ownership of 5 Percent or Less of a Class.

Item 6. Ownership of more than 5 Percent on Behalf of Another Person.

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not Applicable

Item 8. Identification and Classification of Members of the Group.

Not Applicable

Item 9. Notice of Dissolution of Group.

Not Applicable

Item 10. Certifications:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

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.

SABBY MANAGEMENT, LLC

Signature: /s/ Robert Grundstein
Name/Title: COO
Date: 01/20/2026

Hal Mintz

Signature: /S/ HAL MINTZ
Name/Title: HAL MINTZ
Date: 01/20/2026

Sabby Volatility Warrant Master Fund, Ltd.

Signature: /s/ Harry Thompson
Name/Title: Harry Thompson
Date: 01/20/2026