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

# SCHEDULE 13G\*

## (Rule 13d-102)

#### INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO § 240.13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO § 240.13d-2 (Amendment No. 1)\*

Lyra Therapeutics, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value per share (the "Shares")

(Title of Class of Securities)

55234L105

(CUSIP Number)

December 31, 2023

(Date of Event Which Requires Filing of the Statement)

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

 $\square \qquad \text{Rule 13d-1(b)}$ 

Rule 13d-1(c)

 $\square \qquad \text{Rule 13d-1(d)}$ 

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in 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).

1.	NAME OF REPORTING PERSONS							
	Citadel Advis	ors LLC						
2.	CHECK THE	APPROPRIA	ATE BOX IF A MEMBER OF A GROUP	(a)				
				(a) (b)				
3.	SEC USE ONLY							
4.	CITIZENSHIP	OR PLACE	OF ORGANIZATION					
	Delaware							
		5.	SOLE VOTING POWER					
			0					
SF	IBER OF IARES	6.	SHARED VOTING POWER					
	FICIALLY NED BY		4,272,816 Shares					
	EACH ORTING	7.	SOLE DISPOSITIVE POWER					
	ERSON WITH		0					
·		8.	SHARED DISPOSITIVE POWER					
			See Row 6 above					
9.	AGGREGATE	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON						
	See Row 6 abo	See Row 6 above						
10.	10. CHECK IF THE AGGREGATE AMOU		ATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES					
11.		PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)						
		7.9%1						
12.	TYPE OF REF	ORTING PI	ERSON					
	IA; OO; HC	IA; OO; HC						

The percentages reported in this Schedule 13G are based upon 53,987,399 Shares outstanding comprised of (i) 52,563,127 Shares outstanding as of November 1, 2023 (according to the issuer's Form 10-Q as filed with the Securities and Exchange Commission on November 7, 2023), and (ii) 1,424,272 Shares issuable upon conversion of certain warrants held by affiliates of the Reporting Persons.

CUSIP No.	55234L105
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1.	NAME OF REPORTING PERSONS									
	Citadel Advisors Holdings LP									
2.	CHECK THE	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP								
				(a) (b)						
3.	SEC USE ONI									
4.	CITIZENSHIP	OR PLACE	E OF ORGANIZATION							
	Delaware									
		5.	SOLE VOTING POWER							
	BER OF		0							
SH	ARES	6.	SHARED VOTING POWER							
	FICIALLY NED BY		4,272,816 Shares							
	ACH DRTING	7.	SOLE DISPOSITIVE POWER							
	RSON /ITH		0							
		8.	SHARED DISPOSITIVE POWER							
			See Row 6 above							
9.	AGGREGATE	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON								
	See Row 6 abo									
10.	10. CHECK IF THE AGG		GATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES							
11.	PERCENT OF	CLASS RE	PRESENTED BY AMOUNT IN ROW (9)							
	7.9%									
12.	TYPE OF REP	ORTING PI	ERSON							
	PN; HC				PN; HC					

1.	NAME OF REPORTING PERSONS							
	Citadel GP LI	Citadel GP LLC						
2.	CHECK THE	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP						
				(a) (b)				
3.	SEC USE ONI							
4.	CITIZENSHIP	OR PLACE	E OF ORGANIZATION					
	Delaware							
		5.	SOLE VOTING POWER					
			0					
SH	IBER OF IARES	6.	SHARED VOTING POWER					
OWI	FICIALLY NED BY		4,272,816 Shares					
	ACH ORTING	7.	SOLE DISPOSITIVE POWER					
	RSON VITH		0					
		8.	SHARED DISPOSITIVE POWER					
			See Row 6 above					
9.	AGGREGATE	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON						
	See Row 6 abo							
10.	10. CHECK IF THE		ATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES					
11.	PERCENT OF	CLASS RE	PRESENTED BY AMOUNT IN ROW (9)					
	7.9%							
12.	TYPE OF REP	ORTING PI	ERSON					
	OO; HC	<b>OO; HC</b>						

1.	NAME OF REPORTING PERSONS						
	Citadel Secur	ities LLC					
2.	CHECK THE	APPROPRIA	ATE BOX IF A MEMBER OF A GROUP	(a)			
				(a) (b)			
3.	SEC USE ON						
4.	CITIZENSHI	P OR PLACE	E OF ORGANIZATION				
	Delaware						
	·	5.	SOLE VOTING POWER				
			0				
SH	ABER OF HARES	6.	SHARED VOTING POWER				
	FICIALLY NED BY		14,111 Shares				
	EACH ORTING	7.	SOLE DISPOSITIVE POWER				
PE	ERSON WITH		0				
·		8.	SHARED DISPOSITIVE POWER				
			See Row 6 above				
9.	AGGREGATI	E AMOUNT	BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	See Row 6 above						
10.	CHECK IF TH	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES					
11.	PERCENT OF	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)					
	0.0%	0.0%					
12.	TYPE OF RE	PORTING PI	ERSON				
	BD; OO	BD; OO					

1.	NAME OF RE	NAME OF REPORTING PERSONS						
	Citadel Securi	ities Group	LP					
2.	CHECK THE	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP						
				(b)				
3.	SEC USE ONI	SEC USE ONLY						
4.	CITIZENSHIP	OR PLACE	E OF ORGANIZATION					
	Delaware							
		5.	SOLE VOTING POWER					
	(DED OF		0					
SH	ABER OF HARES	6.	SHARED VOTING POWER					
	FICIALLY NED BY		14,111 Shares					
	EACH PORTING	7.	SOLE DISPOSITIVE POWER					
PH	ERSON WITH		0					
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8.	SHARED DISPOSITIVE POWER					
			See Row 6 above					
9.	AGGREGATE	AMOUNT	BENEFICIALLY OWNED BY EACH REPORTING PERSON					
	See Row 6 abo	See Row 6 above						
10.	10. CHECK IF THE A		GATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES					
11.	PERCENT OF	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)						
	0.0%							
12.	TYPE OF REF	PORTING PI	ERSON					
	PN; HC	PN; HC						

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1.	NAME OF REL	NAME OF REPORTING PERSONS							
	Citadel Securi	Citadel Securities GP LLC							
2.	CHECK THE A	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP							
				(a) (b)					
3.	SEC USE ONL								
4.	CITIZENSHIP	OR PLACE	OF ORGANIZATION						
	Delaware								
		5.	SOLE VOTING POWER						
NILIN	IBER OF		0						
SF	IARES	6.	SHARED VOTING POWER						
OW	FICIALLY NED BY		14,111 Shares						
	EACH ORTING	7.	SOLE DISPOSITIVE POWER						
	ERSON WITH		0						
		8.	SHARED DISPOSITIVE POWER						
			See Row 6 above						
9.	AGGREGATE	AMOUNT	BENEFICIALLY OWNED BY EACH REPORTING PERSON						
	See Row 6 above								
10.	10. CHECK IF THE AGO		GATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES						
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)								
	0.0%								
12.	TYPE OF REP	ORTING PI	ERSON						
	<b>OO; HC</b>								

1.	NAME OF REPORTING PERSONS							
	Kenneth Griffi	in						
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP		ATE BOX IF A MEMBER OF A GROUP	(a) (b)				
3.	SEC USE ONL							
4.	CITIZENSHIP	OR PLACE	E OF ORGANIZATION					
	U.S. Citizen							
		5.	SOLE VOTING POWER					
			0					
SH	IBER OF IARES	6.	SHARED VOTING POWER					
	FICIALLY NED BY		4,286,927 Shares					
	ACH ORTING	7.	SOLE DISPOSITIVE POWER					
PE	RSON VITH		0					
·	,	8.	SHARED DISPOSITIVE POWER					
			See Row 6 above					
9.	AGGREGATE	AMOUNT	BENEFICIALLY OWNED BY EACH REPORTING PERSON					
	See Row 6 above							
10.	CHECK IF TH	ATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES						
11.	PERCENT OF	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)						
	7.9%							
12.	TYPE OF REP	ORTING PI	ERSON					
	IN; HC	IN; HC						

## Item 1(a). Name of Issuer:

Lyra Therapeutics, Inc.

## Item 1(b). Address of Issuer's Principal Executive Offices:

480 Arsenal Way, Watertown, MA 02472 United States

## Item 2(a). Name of Person Filing:

This Schedule 13G is being jointly filed by Citadel Advisors LLC ("Citadel Advisors"), Citadel Advisors Holdings LP ("CAH"), Citadel GP LLC ("CGP"), Citadel Securities LLC ("Citadel Securities"), Citadel Securities Group LP ("CALC4"), Citadel Securities GP LLC ("CSGP") and Mr. Kenneth Griffin (collectively with Citadel Advisors, CAH, CGP, Citadel Securities, CALC4 and CSGP, the "Reporting Persons") with respect to the Shares of the above-named issuer owned by Citadel CEMF Investments Ltd., a Cayman Islands limited company ("CCIL"), and Citadel Securities. Such owned Shares may include other instruments exercisable for or convertible into Shares.

Citadel Advisors is the portfolio manager for CCIL. CAH is the sole member of Citadel Advisors. CGP is the general partner of CAH. CALC4 is the non-member manager of Citadel Securities. CSGP is the general partner of CALC4. Mr. Griffin is the President and Chief Executive Officer of CGP, and owns a controlling interest in CGP and CSGP.

The filing of this statement shall not be construed as an admission that any of the Reporting Persons is the beneficial owner of any securities covered by the statement other than the securities actually owned by such person (if any).

#### Item 2(b). Address or Principal Business Office or, if none, Residence:

The address of each of the Reporting Persons is Southeast Financial Center, 200 S. Biscayne Blvd., Suite 3300, Miami, Florida 33131.

#### Item 2(c). Citizenship:

Each of Citadel Advisors, CGP, Citadel Securities and CSGP is organized as a limited liability company under the laws of the State of Delaware. Each of CALC4 and CAH is organized as a limited partnership under the laws of the State of Delaware. Mr. Griffin is a U.S. citizen.

#### Item 2(d). Title of Class of Securities:

Common Stock, \$0.001 par value per share

#### Item 2(e). CUSIP Number:

55234L105

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## 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)  $\square$  Broker or dealer registered under Section 15 of the Act (15 U.S.C. 780);
- (b)  $\square$  Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c)  $\Box$  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)  $\Box$  An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);
- (f)  $\Box$  An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);
- (g)  $\Box$  A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h)  $\Box$  A savings association 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 (15 U.S.C. 80a-3);
- (j)  $\Box$  A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
- (k)  $\Box$  Group, in accordance with § 240.13d-1(b)(1)(ii)(K).

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

## Item 4. Ownership:

- A. Citadel Advisors LLC, Citadel Advisors Holdings LP and Citadel GP LLC
  - (a) Each of Citadel Advisors LLC, Citadel Advisors Holdings LP and Citadel GP LLC may be deemed to beneficially own 4,272,816 Shares.
  - (b) The number of Shares that each of Citadel Advisors LLC, Citadel Advisors Holdings LP and Citadel GP LLC may be deemed to beneficially own constitutes 7.9% of the Shares outstanding.
  - (c) Number of Shares as to which such person has:
    - (i) sole power to vote or to direct the vote: 0
    - (ii) shared power to vote or to direct the vote: 4,272,816
    - (iii) sole power to dispose or to direct the disposition of: 0
    - (iv) shared power to dispose or to direct the disposition of: 4,272,816

- B. Citadel Securities LLC
  - (a) Citadel Securities LLC may be deemed to beneficially own 14,111 Shares.
  - (b) The number of Shares that Citadel Securities LLC may be deemed to beneficially own constitutes 0.0% of the Shares outstanding.
  - (c) Number of shares of Shares as to which such person has:
    - (i) sole power to vote or to direct the vote: 0
    - (ii) shared power to vote or to direct the vote: 14,111
    - (iii) sole power to dispose or to direct the disposition of: 0
    - (iv) shared power to dispose or to direct the disposition of: 14,111
- C. Citadel Securities Group LP and Citadel Securities GP LLC
  - (a) Each of Citadel Securities Group LP and Citadel Securities GP LLC may be deemed to beneficially own 14,111 Shares.
  - (b) The number of Shares that each of Citadel Securities Group LP and Citadel Securities GP LLC may be deemed to beneficially own constitutes 0.0% of the Shares outstanding.
  - (c) Number of Shares as to which such person has:
    - (i) sole power to vote or to direct the vote: 0
    - (ii) shared power to vote or to direct the vote: 14,111
    - (iii) sole power to dispose or to direct the disposition of: 0
    - (iv) shared power to dispose or to direct the disposition of: 14,111

D.	Kenneth	Griffin

- (a) Mr. Griffin may be deemed to beneficially own 4,286,927 Shares.
- (b) The number of Shares that Mr. Griffin may be deemed to beneficially own constitutes 7.9% of the Shares outstanding.
- (c) Number of Shares as to which such person has:
  - (i) sole power to vote or to direct the vote: 0
  - (ii) shared power to vote or to direct the vote: 4,286,927
  - (iii) sole power to dispose or to direct the disposition of: 0
  - (iv) shared power to dispose or to direct the disposition of: 4,286,927

#### Item 5. Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following.  $\Box$ 

#### Item 6. Ownership of More Than Five 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:

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.

#### SIGNATURE

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

Dated February 14, 2024.

## CITADEL SECURITIES LLC

By: /s/ Guy Miller Guy Miller, Authorized Signatory

#### CITADEL SECURITIES GROUP LP

By: /s/ Guy Miller Guy Miller, Authorized Signatory

### CITADEL SECURITIES GP LLC

By: /s/ Guy Miller Guy Miller, Authorized Signatory

#### CITADEL ADVISORS LLC

By: /s/ Seth Levy Seth Levy, Authorized Signatory

## CITADEL ADVISORS HOLDINGS LP

By: /s/ Seth Levy Seth Levy, Authorized Signatory

#### CITADEL GP LLC

By: /s/ Seth Levy Seth Levy, Authorized Signatory

#### **KENNETH GRIFFIN**

By: /s/ Seth Levy Seth Levy, attorney-in-fact\*

\* Seth Levy is signing on behalf of Kenneth Griffin as attorney-in-fact pursuant to a power of attorney previously filed with the Securities and Exchange Commission, and hereby incorporated by reference herein. The power of attorney was filed as an attachment to a filing by Citadel Advisors LLC on Schedule 13G for Allakos Inc. on October 13, 2023.