

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

**SCHEDULE 13D**

Under the Securities Exchange Act of 1934

(Amendment No. 3)\*

**Lantern Pharma Inc.**

(Name of Issuer)

Common Stock, par value \$0.0001 per share  
(Title of Class of Securities)

51654W101  
(CUSIP Number)

Bios Equity Partners, LP  
1751 River Run, Suite 400  
Fort Worth, Texas  
Tel: (817) 984-9197

With a Copy to:  
Rick Jordan  
Polsinelli PC  
2950 Harwood St., Suite 2100  
Dallas, Texas 75201  
Tel: (214) 397-0030

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

February 28, 2024  
(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 Rule 13d-1(e), Rule 13d-1(f) or Rule 13d-1(g), check the following box. ☐

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

\* 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 disclosures provided in a prior cover page.

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).

**CUSIP No. 51654W101**

1	NAME OF REPORTING PERSONS  BIOS FUND I, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS  WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)  <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION  DELAWARE, UNITED STATES	
NUMBER OF SHARES BENEFICIALLY OWNED BY	7  -0-	SOLE VOTING POWER

EACH REPORTING PERSON WITH	8	SHARED VOTING POWER  371,950 (1)
	9	SOLE DISPOSITIVE POWER  -0-
	10	SHARED DISPOSITIVE POWER  371,950 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  371,950 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES  <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  3.5% (2)	
14	TYPE OF REPORTING PERSON  PN	

- (1) Consists of 371,950 shares of common stock of the Issuer, par value \$0.0001 per share ("Shares") directly held by Bios Fund I, LP ("Bios Fund I") as of the date hereof.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP, LP ("Bios Fund I QP") on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, LP ("Bios Fund II"), Bios Fund II QP, LP ("Bios Fund II QP") and Bios Fund II NT, LP ("Bios Fund II NT") on January 17, 2024.

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1	NAME OF REPORTING PERSONS  BIOS FUND I QP, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS  WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)  <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION  DELAWARE, UNITED STATES	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER  -0-
	8	SHARED VOTING POWER  217,553 (1)
	9	SOLE DISPOSITIVE POWER  -0-
	10	SHARED DISPOSITIVE POWER  217,553 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  217,553 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES  <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  2.0% (2)	
14	TYPE OF REPORTING PERSON  PN	

- (1) Consists of 217,553 Shares directly held by Bios Fund I QP as of the date hereof.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

1	NAME OF REPORTING PERSONS BIOS FUND II, LP		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS WC		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE, UNITED STATES		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-
		8	SHARED VOTING POWER 137,832 (1)
		9	SOLE DISPOSITIVE POWER -0-
		10	SHARED DISPOSITIVE POWER 137,832 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 137,832 (1)		
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 1.3% (2)		
14	TYPE OF REPORTING PERSON PN		

(1) Consists of 137,832 Shares directly held by Bios Fund II as of the date hereof.

(2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer’s quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

1	NAME OF REPORTING PERSONS BIOS FUND II QP, LP		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS WC		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE, UNITED STATES		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-
		8	SHARED VOTING POWER 450,118 (1)
		9	SOLE DISPOSITIVE POWER -0-

	10	SHARED DISPOSITIVE POWER
		450,118 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
		450,118 (1)
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
		<input type="checkbox"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
		4.2% (2)
14	TYPE OF REPORTING PERSON	
		PN

(1) Consists of 450,118 Shares directly held by Bios Fund II QP as of the date hereof.

(2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

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1	NAME OF REPORTING PERSONS	
	BIOS FUND II NT, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS	
	WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
	<input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	DELAWARE, UNITED STATES	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER
		-0-
	8	SHARED VOTING POWER
		60,256 (1)
	9	SOLE DISPOSITIVE POWER
		-0-
	10	SHARED DISPOSITIVE POWER
		60,256 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	60,256 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
	<input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	0.6% (2)	
14	TYPE OF REPORTING PERSON	
	PN	

(1) Consists of 60,256 Shares directly held by Bios Fund II NT as of the date hereof.

(2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

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1	NAME OF REPORTING PERSONS BP DIRECTORS, LP		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS OO		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE, UNITED STATES		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-	
	8	SHARED VOTING POWER 26,093 (1)	
	9	SOLE DISPOSITIVE POWER -0-	
	10	SHARED DISPOSITIVE POWER 26,093 (1)	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 26,093 (1)		
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.2% (2)		
14	TYPE OF REPORTING PERSON PN		

- (1) Consists of 26,093 Shares directly held by BP Directors, LP (“Bios Directors”) as of the date hereof.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer’s quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

CUSIP No. 51654W101

1	NAME OF REPORTING PERSONS BIOS EQUITY PARTNERS, LP		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS AF		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION TEXAS, UNITED STATES		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-	
	8	SHARED VOTING POWER 615,596 (1)	
	9	SOLE DISPOSITIVE POWER -0-	

	10	SHARED DISPOSITIVE POWER 615,596 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 615,596 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 5.7% (2)	
14	TYPE OF REPORTING PERSON PN	

- (1) Consists of (i) 371,950 Shares directly held by Bios Fund I, (ii) 217,553 Shares directly held by Bios Fund I QP and (iii) 26,093 Shares directly held by Bios Directors, in each case, as of the date hereof. Bios Equity Partners, LP ("Bios Equity I") is the general partner of Bios Fund I, Bios Fund I QP and Bios Directors. In its capacity as the general partner of these entities, Bios Equity I may be deemed to have shared voting and/or dispositive power with respect to Shares directly or indirectly held by these entities.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

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1	NAME OF REPORTING PERSONS BIOS EQUITY PARTNERS II, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION TEXAS, UNITED STATES	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-
	8	SHARED VOTING POWER 648,206 (1)
	9	SOLE DISPOSITIVE POWER -0-
	10	SHARED DISPOSITIVE POWER 648,206 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 648,206 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.0% (2)	
14	TYPE OF REPORTING PERSON PN	

- (1) Consists of (i) 137,832 Shares directly held by Bios Fund II, (ii) 450,118 Shares directly held by Bios Fund II QP and (iii) 60,256 Shares directly held by Bios Fund II NT, in each case, as of the date hereof. Bios Equity Partners II, LP ("Bios Equity II") is the general partner of Bios Fund II, Bios Fund II QP and Bios Fund II NT. In its capacity as the general partner of these entities, Bios Equity II may be deemed to have shared voting and/or dispositive power with respect to Shares and warrants to purchase Shares, in each case, directly held by these entities.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

1	NAME OF REPORTING PERSONS CAVU MANAGEMENT, LP		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS AF		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION TEXAS, UNITED STATES		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-
		8	SHARED VOTING POWER 1,263,802 (1)
		9	SOLE DISPOSITIVE POWER -0-
		10	SHARED DISPOSITIVE POWER 1,263,802 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,263,802 (1)		
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 11.8% (2)		
14	TYPE OF REPORTING PERSON PN		

- (1) Consists of (i) 371,950 Shares directly held by Bios Fund I, (ii) 217,553 Shares directly held by Bios Fund I QP, (iii) 137,832 Shares directly held by Bios Fund II, (iv) 450,118 Shares directly held by Bios Fund II QP, (v) 60,256 Shares directly held by Bios Fund II NT and (vi) 26,093 Shares held by Bios Directors, in each case, as of the date hereof. Bios Equity I is the general partner of Bios Fund I, Bios Fund I QP and Bios Directors. Bios Equity II is the general partner of Bios Fund II, Bios Fund II QP and Bios Fund II NT. Cavu Management, LP (“Cavu Management”) is a general partner of Bios Equity I and Bios Equity II. In its capacity as a general partner of Bios Equity I and Bios Equity II, Cavu Management may be deemed to have shared voting and/or dispositive power with respect to Shares and warrants to purchase Shares, in each case, directly or indirectly held by Bios Fund I, Bios Fund I QP, Bios Fund II, Bios Fund II QP, Bios Fund II NT and Bios Directors.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer’s quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

1	NAME OF REPORTING PERSONS BIOS CAPITAL MANAGEMENT, LP		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS AF		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION TEXAS, UNITED STATES		
	NUMBER OF SHARES BENEFICIALLY OWNED BY	7	SOLE VOTING POWER -0-

EACH REPORTING PERSON WITH	8	SHARED VOTING POWER  1,263,802 (1)
	9	SOLE DISPOSITIVE POWER  -0-
	10	SHARED DISPOSITIVE POWER  1,263,802 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  1,263,802 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES  <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  11.8% (2)	
14	TYPE OF REPORTING PERSON  PN	

- (1) Consists of (i) 371,950 Shares directly held by Bios Fund I, (ii) 217,553 Shares directly held by Bios Fund I QP, (iii) 137,832 Shares directly held by Bios Fund II, (iv) 450,118 Shares directly held by Bios Fund II QP, (v) 60,256 Shares directly held by Bios Fund II NT and (vi) 26,093 Shares held by Bios Directors, in each case, as of the date hereof. Bios Equity I is the general partner of Bios Fund I, Bios Fund I QP and Bios Directors. Bios Equity II is the general partner of Bios Fund II, Bios Fund II QP and Bios Fund II NT. Bios Capital Management, LP ("Bios Management") is a general partner of Bios Equity I and Bios Equity II. In its capacity as a general partner of Bios Equity I and Bios Equity II, Bios Management may be deemed to have shared voting and/or dispositive power with respect to Shares and warrants to purchase Shares, in each case, directly or indirectly held by Bios Fund I, Bios Fund I QP, Bios Fund II, Bios Fund II QP, Bios Fund II NT and Bios Directors.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

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1	NAME OF REPORTING PERSONS  CAVU ADVISORS, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS  AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)  <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION  TEXAS, UNITED STATES	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER  -0-
	8	SHARED VOTING POWER  1,263,802 (1)
	9	SOLE DISPOSITIVE POWER  -0-
	10	SHARED DISPOSITIVE POWER  1,263,802 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  1,263,802 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES  <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  11.8% (2)	
14	TYPE OF REPORTING PERSON  OO	



- (1) Consists of (i) 371,950 Shares directly held by Bios Fund I, (ii) 217,553 Shares directly held by Bios Fund I QP, (iii) 137,832 Shares directly held by Bios Fund II, (iv) 450,118 Shares directly held by Bios Fund II QP, (v) 60,256 Shares directly held by Bios Fund II NT and (vi) 26,093 Shares held by Bios Directors, in each case, as of the date hereof. Bios Equity I is the general partner of Bios Fund I, Bios Fund I QP and Bios Directors. Bios Equity II is the general partner of Bios Fund II, Bios Fund II QP and Bios Fund II NT. Cavu Management is a general partner of Bios Equity I and Bios Equity II. Cavu Advisors, LLC (“Cavu Advisors”) is the general partner of Cavu Management, and therefore, may be deemed to have shared voting and/or dispositive power with respect to Shares and warrants to purchase Shares, in each case, directly or indirectly held by Bios Fund I, Bios Fund I QP, Bios Fund II, Bios Fund II QP, Bios Fund II NT and Bios Directors.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer’s quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

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1	NAME OF REPORTING PERSONS BIOS ADVISORS GP, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION TEXAS, UNITED STATES	
	7	SOLE VOTING POWER -0-
	8	SHARED VOTING POWER 1,263,802 (1)
	9	SOLE DISPOSITIVE POWER -0-
	10	SHARED DISPOSITIVE POWER 1,263,802 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,263,802 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 11.8% (2)	
14	TYPE OF REPORTING PERSON OO	

- (1) Consists of (i) 371,950 Shares directly held by Bios Fund I, (ii) 217,553 Shares directly held by Bios Fund I QP, (iii) 137,832 Shares directly held by Bios Fund II, (iv) 450,118 Shares directly held by Bios Fund II QP, (v) 60,256 Shares directly held by Bios Fund II NT and (vi) 26,093 Shares held by Bios Directors, in each case, as of the date hereof. Bios Equity I is the general partner of Bios Fund I, Bios Fund I QP and Bios Directors. Bios Equity II is the general partner of Bios Fund II, Bios Fund II QP and Bios Fund II NT. Bios Management is a general partner of Bios Equity I and Bios Equity II. Bios Advisors GP, LLC (“Bios Advisors”) is the general partner of Bios Management, and therefore, may be deemed to have shared voting and/or dispositive power with respect to Shares and warrants to purchase Shares, in each case, directly or indirectly held by Bios Fund I, Bios Fund I QP, Bios Fund II, Bios Fund II QP, Bios Fund II NT and Bios Directors.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer’s quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

**CUSIP No. 51654W101**

1	NAME OF REPORTING PERSONS LESLIE WAYNE KREIS, JR.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	

3	SEC USE ONLY	
4	SOURCE OF FUNDS AF, OO	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION UNITED STATES	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 1,263,802 (1)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 1,263,802 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,263,802 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 11.8% (2)	
14	TYPE OF REPORTING PERSON IN	

- (1) Consists of (i) 371,950 Shares directly held by Bios Fund I, (ii) 217,553 Shares directly held by Bios Fund I QP, (iii) 137,832 Shares directly held by Bios Fund II, (iv) 450,118 Shares directly held by Bios Fund II QP, (v) 60,256 Shares directly held by Bios Fund II NT and (vi) 26,093 Shares held by Bios Directors, in each case, as of the date hereof. Bios Equity I is the general partner of Bios Fund I, Bios Fund I QP and Bios Directors. Bios Equity II is the general partner of Bios Fund II, Bios Fund II QP and Bios Fund II NT. Cavu Management is a general partner of Bios Equity I and Bios Equity II. Cavu Advisors, an entity controlled by Mr. Kreis, is the general partner of Cavu Management. As the manager of Cavu Advisors, Mr. Kreis may be deemed to have shared voting and/or dispositive power with respect to Shares and warrants to purchase Shares, in each case, directly or indirectly held by Bios Fund I, Bios Fund I QP, Bios Fund II, Bios Fund II QP, Bios Fund II NT and Bios Directors.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

CUSIP No. 51654W101

1	NAME OF REPORTING PERSONS AARON GLENN LOUIS FLETCHER	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION UNITED STATES	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-
	8	SHARED VOTING POWER 1,263,802 (1)
	9	SOLE DISPOSITIVE POWER -0-
	10	SHARED DISPOSITIVE POWER 1,263,802 (1)

11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,263,802 (1)
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 11.8% (2)
14	TYPE OF REPORTING PERSON IN

- (1) Consists of (i) 371,950 Shares directly held by Bios Fund I, (ii) 217,553 Shares directly held by Bios Fund I QP, (iii) 137,832 Shares directly held by Bios Fund II, (iv) 450,118 Shares directly held by Bios Fund II QP, (v) 60,256 Shares directly held by Bios Fund II NT and (vi) 26,093 Shares held by Bios Directors, in each case, as of the date hereof. Bios Equity I is the general partner of Bios Fund I, Bios Fund I QP and Bios Directors. Bios Equity II is the general partner of Bios Fund II, Bios Fund II QP and Bios Fund II NT. Bios Management is a general partner of Bios Equity I and Bios Equity II. Bios Advisors, an entity controlled by Aaron Glenn Louis Fletcher, is the general partner of Bios Management. As the manager of Bios Advisors, Mr. Fletcher may be deemed to have shared voting and/or dispositive power with respect to Shares and warrants to purchase Shares, in each case, directly or indirectly held by Bios Fund I, Bios Fund I QP, Bios Fund II, Bios Fund II QP, Bios Fund II NT and Bios Directors.
- (2) Based on 10,743,824 Shares, which consists of (i) 10,869,040 Shares as of November 3, 2023, as reported in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2023, *minus* (ii) 145,348 Shares purchased in the aggregate by the Issuer from Bios Fund I and Bios Fund I QP on November 21, 2023, *plus* (iii) 20,132 Shares issued in the aggregate upon the cashless exercise of warrants directly held by Bios Fund II, Bios Fund II QP and Bios Fund II NT on January 17, 2024.

#### Item 1. SECURITY AND ISSUER

This Amendment No. 3 hereby amends and supplements the statement on Schedule 13D originally filed with the Securities and Exchange Commission on June 15, 2020 (the "Original Schedule 13D"), as amended by the statement on Schedule 13D/A filed with the Securities and Exchange Commission on March 22, 2022 ("Amendment No. 1"), as further amended by the statement on Schedule 13D/A filed with the Securities and Exchange Commission on December 1, 2023 ("Amendment No. 2" and, together with the Original Schedule 13D and Amendment No. 1, the "Prior Statements"). The securities to which the Schedule 13D relates are the shares of common stock, par value \$0.0001 per share (the "Shares"), of Lantern Pharma, Inc., a Delaware corporation (the "Issuer").

The Purpose of this Amendment No. 3 is to disclose the sale of Shares by each of Bios Fund II, LP ("Bios Fund II"), Bios Fund II QP, LP ("Bios Fund II QP") and Bios Fund II NT, LP ("Bios Fund II NT") on the open market. Except as otherwise provided herein, each Item of the Prior Statements remains unchanged. Capitalized terms used herein but not defined in this Amendment No. 3 shall have the meaning ascribed to such term in the Prior Statements.

#### Item 5. INTEREST IN SECURITIES OF THE ISSUER

Item 5 of the Schedule 13D is hereby amended and restated in its entirety to read as follows:

- (a) See rows (11) and (13) of the cover pages to this Amendment No. 3 for the aggregate number of Shares and percentages of the Shares beneficially owned by each of the Reporting Persons. See footnotes (1) and (2), as applicable, of the cover pages to this Amendment No. 3 for the calculations used in determining the percentages of Shares beneficially owned by each of the Reporting Persons.
- (b) See rows (7) through (10) of the cover pages to this Amendment No. 3 for the number of Shares as to which each Reporting Person has the sole or shared power to vote or direct the vote and sole or shared power to dispose or to direct the disposition.
- (c) On January 17, 2024, each of Bios Fund II NT, Bios Fund II QP and Bios Fund II exercised warrants to purchase 7,347, 54,873 and 16,801, respectively, shares of common stock of the Issuer. Each of Bios Fund II NT, Bios Fund II QP and Bios Fund II paid the exercise price on a cashless basis, resulting in the Issuer withholding 5,475, 40,893 and 12,521, respectively, of the warrant shares to pay the exercise price and issuing Bios Fund II NT, Bios Fund II QP and Bios Fund II the remaining 1,872, 13,980 and 4,280 shares respectively.

On February 27, 2024, each of Bios Fund II NT, Bios Fund II QP and Bios Fund II sold 4,649, 34,371 and 10,620, respectively, shares of common stock of the Issuer on the open market at a weighted average price of \$4.40. These shares were sold in multiple transactions ranging from \$4.35 to \$4.50. The Reporting Persons undertake to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.

On February 28, 2024, each of Bios Fund II NT, Bios Fund II QP and Bios Fund II sold 6,909, 51,608 and 15,780, respectively, shares of common stock of the Issuer on the open market at a weighted average price of \$4.85. These shares were sold in multiple transactions ranging from \$4.60 to \$5.21. The Reporting Persons undertake to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.

On February 29, 2024, each of Bios Fund II NT, Bios Fund II QP and Bios Fund II sold 1,832, 13,686 and 4,185, respectively, shares of common stock of the Issuer on the open market at a weighted average price of \$4.87. These shares were sold in multiple transactions ranging from \$4.62 to \$5.33. The Reporting Persons undertake to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.

- (d) Except as described in this Amendment No. 3 to the knowledge of the Reporting Persons, only the reporting Persons have the right to receive or the power to direct receipt of dividends from, or proceeds from the sale of, the Shares reported by the Schedule 13D.
- (e) Not applicable.

#### Item 7. EXHIBITS

- A Joint Filing Agreement, dated June 23, 2020 (incorporated by reference to the Original Schedule 13D, filed on June 23, 2020).

SIGNATURES

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

Date: March 1, 2024

**BIOS FUND I, LP**

By: Bios Equity Partners, LP,  
its general partner

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

**BIOS FUND I QP, LP**

By: Bios Equity Partners, LP,  
its general partner

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

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**BP DIRECTORS, LP**

By: Bios Equity Partners, LP,  
its general partner

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

## **BIOS FUND II, LP**

By: Bios Equity Partners II, LP,  
its general partner

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

## **BIOS FUND II QP, LP**

By: Bios Equity Partners II, LP,  
its general partner

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

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## **BIOS FUND II NT, LP**

By: Bios Equity Partners II, LP,  
its general partner

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

## **BIOS EQUITY PARTNERS, LP**

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

**BIOS EQUITY PARTNERS II, LP**

By: Cavu Management, LP,  
its general partner

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

By: Bios Capital Management, LP,  
its general partner

By: Bios Advisors GP, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

**CAVU MANAGEMENT, LP**

By: Cavu Advisors, LLC,  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

**BIOS CAPITAL MANAGEMENT, LP**

By: Bios Advisors GP, LLC  
its general partner

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

**CAVU ADVISORS, LLC**

By: /s/ Daniel Schwarz  
Daniel Schwarz  
Attorney-in-Fact

**BIOS ADVISORS GP, LLC**

By: /s/ Daniel Schwarz  
Daniel Schwarz

Attorney-in-Fact

/s/ Daniel Schwarz

**DANIEL SCHWARZ**, as Attorney-in-Fact for Leslie Wayne Kreis, Jr.

/s/ Daniel Schwarz

**DANIEL SCHWARZ**, as Attorney-in-Fact for Aaron Glenn Louis Fletcher