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

**SCHEDULE 13D** 

Under the Securities Exchange Act of 1934 (Amendment No. 2)\*

# X4 Pharmaceuticals, Inc.

(Name of Issuer)

# Common Stock, \$0.001 par value

(Title of Class of Securities)

# 98420X103

(CUSIP Number)

Louis S. Citron, Esq.
New Enterprise Associates
1954 Greenspring Drive, Suite 600, Timonium, MD 21093
(410) 842-4000

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

# May 18, 2023

(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  $\S240.13d-1(e)$ , 240.13d-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 §240.13d-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. 98420X103	13D	Page 2 of 23 Pages

1.	NAMES OF	REPORTI	NG PERSONS.					
	Growth Equity Opportunities 18 VGE, LLC							
2.	CHECK THE	E APPROP	RIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) □ (b) □				
				( )				
3.	SEC USE ON	NLY						
4.	SOURCE OF	FUNDS (	see instructions)					
	WC							
5.	CHECK BOX	X IF DISCI	LOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)					
6.	CITIZENSH	IP OR PLA	CE OF ORGANIZATION					
	Delaware Li	mited Lial	pility Company					
		7	SOLE VOTING POWER					
		7.	0 Shares					
NUME	BER OF	8.	SHARED VOTING POWER					
SHA	ARES CIALLY		15,742,792 Shares					
	BY EACH	O BY EACH ORTING	9.	SOLE DISPOSITIVE POWER				
PERSO	N WITH		0 Shares					
		10.	SHARED DISPOSITIVE POWER					
			15,742,792 Shares					
11.	AGGREGA	ATE AMOU	L UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
,	15,742,792 Shares							
10	CHECK B	OX IF THE	E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)					
12.	GILGIT B	02111 1111	2100120112111100111 INTO W (11) ENGLODED GENTIM VOTE INCE (Get instructions)	_				
	DEDCENT	OF CLAS	C DEDDECENTED DV AMOUNT IN DOW (41)					
13.		OF CLAS	S REPRESENTED BY AMOUNT IN ROW (11)					
	9.99%							
14.	TYPE OF I	REPORTIN	NG PERSON (see instructions)					
	00							

CUSIP N	No. 98420X103			13D	F	Page 3 of 23 Pages
1.	NAMES OF	REPORTIN	IG PERSONS.			
	NEA 18 Vent	ture Growt	h Equity, L.P.			
2.	CHECK THE	E APPROPE	RIATE BOX II	A MEMBER OF A GROUP (see instructions)		(a) 🗆
						(b) 🗖
2	SEC USE ON	JIV				
3.	520 052 01	<b>.</b>				
4.	SOURCE OF	FUNDS (s	ee instructions	)		
	WC					
5.	СНЕСК ВОХ	K IF DISCL	OSURE OF L	EGAL PROCEEDINGS IS REQUIRED PURSUAN	T TO ITEMS 2(d) or 2(e)	
<b>.</b>						
6.	CITIZENSHI	IP OR PLA	CE OF ORGA	NIZATION		
	Delaware Li	mited Part	nership			
I		7.	SOLE VO	TING POWER		
		' '	0 Shares			
		8.	SHARED	OTING POWER		
SHA	BER OF ARES		15,742,792	Shares		
OWNED	ICIALLY BY EACH	9.	SOLE DIS	POSITIVE POWER		
	RTING N WITH	<b>J.</b>	0 Shares			
			o shares			
		10.	SHARED I	DISPOSITIVE POWER		
			15,742,792	Shares		
11	AGGREGA	TE AMOL	INT BENEFIC	EIALLY OWNED BY EACH REPORTING PERSON	J	
11.						
	15,742,792	Snares				
12.	CHECK BO	OX IF THE	AGGREGAT	E AMOUNT IN ROW (11) EXCLUDES CERTAIN	SHARES (see instructions)	
13.	PERCENT	OF CLASS	S REPRESEN	TED BY AMOUNT IN ROW (11)		
13.	9.99%					
	3.33 70					
14.	TYPE OF REPORTING PERSON (see instructions)					

PN

CUSIP N	lo. 98420X103			13D		Page 4 of 23 Pages	
1.	NAMES OF REPORTING PERSONS.  NEA Partners 18 VGE, L.P.						
2.	СНЕСК ТНЕ	E APPROPI	RIATE BOX II	F A MEMBER OF A GROUP (see instructions)		(a)	
3.	SEC USE ONLY						
4.	SOURCE OF FUNDS (see instructions)  AF						
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)						
6.	CITIZENSHIP OR PLACE OF ORGANIZATION  Delaware Limited Partnership						
0 Shares  8. SHARED  NUMBER OF SHARES BENEFICIALLY			TING POWER				
		8.	SHARED 15,742,792	VOTING POWER  Shares			
		9.		POSITIVE POWER			
10.			10. SHARED DISPOSITIVE POWER 15,742,792 Shares				
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  15,742,792 Shares						
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)						

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

TYPE OF REPORTING PERSON (see instructions)

13.

14.

9.99%

PN

CUSIP	No. 98420X103			13D			Page 5 of 23 Pages	
1.	NAMES OF REPORTING PERSONS.  NEA 18 VGE GP, LLC							
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)  (a) (b) (b)							
3.	SEC USE ONLY							
4.	SOURCE OF FUNDS (see instructions)  AF							
5.	СНЕСК ВОУ	K IF DISCI	OSURE OF L	EGAL PROCEEDINGS IS REC	QUIRED PURSUAN	TT TO ITEMS 2(d) or 2(e)		
6.			CE OF ORGA					
		7.	SOLE VOT	TING POWER				
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		8.	SHARED V 15,742,792	OTING POWER  Shares				
		9.	SOLE DIS	POSITIVE POWER				
		10.	SHARED I 15,742,792	DISPOSITIVE POWER  Shares				
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  15,742,792 Shares							

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

TYPE OF REPORTING PERSON (see instructions)

12.

13.

14.

9.99%

00

CUSIP	No. 98420X103	13D	Pag	e 6 of 23 Pages
1.	NAMES OF REPORTING PERSONS.  Ali Behbahani			
2.	CHECK THE APPROPRIATE BOX IF	FA MEMBER OF A GROUP (see instructions)	)	(a)
3.	SEC USE ONLY			
4.	SOURCE OF FUNDS (see instructions	)		
	AF			
5.	CHECK BOX IF DISCLOSURE OF L	EGAL PROCEEDINGS IS REQUIRED PUR	SUANT TO ITEMS 2(d) or 2(e)	

		8.	SHARED VOTING POWER
NUMBI SHAI BENEFIC	RES		15,742,792 Shares
OWNED B	_	9.	SOLE DISPOSITIVE POWER
PERSON	_		0 shares
		10.	SHARED DISPOSITIVE POWER
			15,742,792 Shares
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)

CITIZENSHIP OR PLACE OF ORGANIZATION

7.

SOLE VOTING POWER

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

TYPE OF REPORTING PERSON (see instructions)

0 shares

6.

11.

12.

13.

14.

**United States** 

15,742,792 Shares

9.99%

IN

CUSIP No. 98420X103	13D	Page 7 of 23 Pages

1.	NAMES OF REPORTING PERSONS.  Carmen Chang						
2.	CHECK THE	E APPROPI	RIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a)			
3.	SEC USE ON	NLY					
4.	SOURCE OF	FUNDS (	see instructions)				
	AF						
5.	CHECK BOX	X IF DISCI	LOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)				
6.	CITIZENSH	IP OR PLA	CE OF ORGANIZATION				
	United State	s					
		7.	SOLE VOTING POWER				
		, •	0 Shares				
		0	SHARED VOTING POWER				
	BER OF	8.					
BENEF	ARES ICIALLY		15,742,792 Shares				
REPO	BY EACH RTING	9.	SOLE DISPOSITIVE POWER				
PERSO	N WITH		0 Shares				
		10.	SHARED DISPOSITIVE POWER				
			15,742,792 Shares				
11.	AGGREGA	ATE AMOU	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	15,742,792 Shares						
12.	CHECK B	OX IF THE	E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)				
13.	PERCENT	OF CLAS	S REPRESENTED BY AMOUNT IN ROW (11)				
	9.99%						
14.	TYPE OF I	REPORTIN	NG PERSON (see instructions)				
-	IN						

CUSIP No. 98420X103	13D	Page 8 of 23 Pages

1.	NAMES OF REPORTING PERSONS.						
	Anthony A. Florence, Jr.						
2.	CHECK THE	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)  (a)  (b)  (b)					
3.	SEC USE ON	NLY					
4.		FUNDS (s	see instructions)				
	AF						
5.	CHECK BOX	K IF DISCL	LOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)				
6.			CE OF ORGANIZATION				
	United State	s					
		7.	SOLE VOTING POWER				
			0 Shares				
		8.	SHARED VOTING POWER				
SH	NUMBER OF SHARES BENEFICIALLY		15,742,792 Shares				
OWNED REPO	BY EACH ORTING	9.	SOLE DISPOSITIVE POWER				
PERSO	ON WITH		0 Shares				
		10.	SHARED DISPOSITIVE POWER				
			15,742,792 Shares				
11.	AGGREGA	ATE AMOU	JNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	15,742,792 Shares						
12.	CHECK B	OX IF THE	E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)				
13.	PERCENT	OF CLASS	S REPRESENTED BY AMOUNT IN ROW (11)				
	9.99%						
14.	TYPE OF I	REPORTIN	NG PERSON (see instructions)				
	IN						
<u> </u>							

CUSIP No. 98420X103	13D	Page 9 of 23 Pages

1.	NAMES OF REPORTING PERSONS.						
	Mohamad H. Makhzoumi						
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)  (a) (b) (1)						
3.	SEC USE ONLY						
4.	SOURCE OF	FUNDS (s	see instructions)				
	711						
5.	СНЕСК ВОУ	K IF DISCL	OSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)				
6.	CITIZENSHI	P OR PLA	CE OF ORGANIZATION				
	United States	s					
		7.	SOLE VOTING POWER  0 Shares				
SH	BER OF ARES ICIALLY	8.	SHARED VOTING POWER  15,742,792 Shares				
REPO	BY EACH DRTING DN WITH	9.	SOLE DISPOSITIVE POWER  0 Shares				
		10.	SHARED DISPOSITIVE POWER				
			15,742,792 Shares				
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  15,742,792 Shares						
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)						
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)						
	9.99%						
14.	TYPE OF I	REPORTIN	IG PERSON (see instructions)				
	IN						

CUSIP No. 98420X103			13D	•		Page 10 of 23 Pages	
1.	NAMES OF R	EPORTIN	IG PERSONS.				
	Edward T. Ma	athers					
2.	CHECK THE	APPROPF	RIATE BOX IF	FA MEMBER OF A GROU	P (see instructions	s)	(a)
3.	SEC USE ONI	LY					
4.	SOURCE OF FUNDS (see instructions)						
	AF						
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)						
6.	CITIZENSHIP OR PLACE OF ORGANIZATION						
	United States						
		7.	SOLE VO	TING POWER			

0 Shares

0 Shares

8.

9.

10.

15,742,792 Shares

9.99%

IN

NUMBER OF

SHARES BENEFICIALLY OWNED BY EACH

REPORTING PERSON WITH

11.

12.

13.

14.

SHARED VOTING POWER

SOLE DISPOSITIVE POWER

SHARED DISPOSITIVE POWER

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)

15,742,792 Shares

15,742,792 Shares

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

TYPE OF REPORTING PERSON (see instructions)

CUSIP	No. 98420X103	13D	Page 11 of 23 Pages
=			
1	NAMES OF REPORTING PERSONS		

1.	NAMES OF REPORTING PERSONS.						
	Scott D. Sandell						
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)  (a) (b) (b)						
3.	SEC USE ONLY						
4.	SOURCE OF	FUNDS (s	see instructions)				
5.	СНЕСК ВОУ	K IF DISCL	LOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)				
6.	CITIZENSHIP OR PLACE OF ORGANIZATION  United States						
		7.	SOLE VOTING POWER  0 Shares				
SH. BENEF	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		SHARED VOTING POWER  15,742,792 Shares				
REPO			SOLE DISPOSITIVE POWER  0 Shares				
			SHARED DISPOSITIVE POWER  15,742,792 Shares				
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  15,742,792 Shares						
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)						
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  9.99%						
14.	TYPE OF REPORTING PERSON (see instructions)  IN						

CUSIP No. 98420X103				13D			Page 12 of 23 Pages	
1.	NAMES OF REPORTING PERSONS.  Paul Walker							
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)  (a)  (b)  (b)							
3.	SEC USE ONLY							
4.	SOURCE OF FUNDS (see instructions)  AF							
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)							
6.	CITIZENSHIP OR PLACE OF ORGANIZATION  United States							
NUMB	SER OF	7. 8.	0 Shares	TING POWER  /OTING POWER				
SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		9.		POSITIVE POWER				
		10. SHARED DISPOSITIVE POWER 15,742,792 Shares						
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  15,742,792 Shares							

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

TYPE OF REPORTING PERSON (see instructions)

12.

13.

14.

9.99%

IN

CUSIP No. 98420X103				13D		Page 13 of 23 Pages	
1.	NAMES OF REPORTING PERSONS.  Rick Yang						
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)  (a) (b) (1)						
3.	SEC USE ONLY						
4.	SOURCE OF FUNDS (see instructions)  AF						
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)						
6.	CITIZENSHIP OR PLACE OF ORGANIZATION  United States citizen						
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7.	SOLE VOTE  0 Shares	NG POWER			
		8.	SHARED VO 15,742,792 S	DTING POWER			
		9.	SOLE DISPO	OSITIVE POWER			
		10. SHARED DISPOSITIVE POWER 15,742,792 Shares					
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  15,742,792 Shares						
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)						

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

TYPE OF REPORTING PERSON (see instructions)

13.

14.

9.99%

IN

# Schedule 13D

# Item 1. Security and Issuer.

This Amendment No. 2 ("Amendment No. 2") to Schedule 13D amends and supplements the statements on the Schedule 13D originally filed on July 19, 2022 and Amendment No. 1 thereto filed on December 20, 2022, relating to the common stock, \$0.001 par value (the "Common Stock"), of X4 Pharmaceuticals, Inc. (the "Issuer"), having its principal executive office at 61 North Beacon Street, 4th Floor, Boston, Massachusetts.

Certain terms used but not defined in this Amendment No. 2 (including Amendment No. 1 thereto) have the meanings assigned thereto in the Schedule 13D. Except as specifically provided herein, this Amendment No. 2 does not modify any of the information previously reported on the Schedule 13D (including Amendment No. 1 thereto).

#### Item 2. Identity and Background.

This statement is being filed by:

- (a) Growth Equity Opportunities 18 VGE, LLC ("GEO");
- (b) NEA 18 Venture Growth Equity, L.P. ("NEA 18 VGE"), which is the sole member of GEO; NEA Partners 18 VGE, L.P. ("NEA Partners 18 VGE"), which is the sole general partner of NEA 18 VGE; and NEA 18 VGE GP, LLC ("NEA 18 VGE LLC" and, together with NEA Partners 18 VGE, the "Control Entities"), which is the sole general partner of NEA Partners 18 VGE; and
- (c) Ali Behbahani ("Behbahani"), Carmen Chang ("Chang"), Anthony A. Florence, Jr. ("Florence"), Mohamad H. Makhzoumi ("Makhzoumi"), Edward T. Mathers ("Mathers"), Scott D. Sandell ("Sandell"), Paul Walker ("Walker") and Rick Yang ("Yang") (together, the "Managers") and Liza Landsman ("Landsman") and Peter W. Sonsini ("Sonsini"). The Managers are the managers of NEA 18 VGE LLC.

The persons named in this Item 2 are referred to individually herein as a "Reporting Person" and collectively as the "Reporting Persons."

The address of the principal business office of GEO, NEA 18 VGE, each Control Entity and Sandell is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093. The address of the principal business office of Behbahani and Mathers is New Enterprise Associates, 5425 Wisconsin Avenue, Suite 800, Chevy Chase, MD 20815. The address of the principal business office of Chang, Makhzoumi, Walker and Yang is New Enterprise Associates, 2855 Sand Hill Road, Menlo Park, California 94025. The address of the principal business office of Florence is New Enterprise Associates, 104 5<sup>th</sup> Avenue, 19<sup>th</sup> Floor, New York, NY 10001.

The principal business of GEO and NEA 18 VGE is to invest in and assist growth-oriented businesses located principally in the United States. The principal business of NEA Partners 18 VGE is to act as the sole general partner of NEA 18 VGE. The principal business of NEA 18 VGE LLC is to act as the sole general partner of NEA Partners 18 VGE. The principal business of each of the Managers is to manage the Control Entities, GEO and a number of affiliated partnerships with similar businesses.

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.

GEO and NEA 18 VGE LLC are limited liability companies organized under the laws of the State of Delaware. NEA 18 VGE and NEA Partners 18 VGE are limited partnerships organized under the laws of the State of Delaware. Each of the Managers is a United States citizen.

# Item 3. Source and Amount of Funds or Other Consideration.

On May 15, 2023, the Issuer entered into a securities purchase agreement (the "Securities Purchase Agreement") with several institutional accredited investors, including GEO, pursuant to which the Issuer agreed to issue and sell to the investors in a private placement (the "Private Placement") (i) an aggregate of 34,521,046 shares of Common Stock and (ii) pre-funded warrants to purchase an aggregate of 8,263,157 shares of Common Stock (the "Pre-Funded Warrants"). On May 18, 2023, the Private Placement closed. In connection with this closing, GEO purchased (i) 3,250,000 shares of Common Stock (the "GEO Common Shares") at a purchase price of \$1.52 per share; and (ii) Pre-Funded Warrants to purchase 4,973,684 shares of Common Stock (the "GEO Pre-Funded Warrant Shares"), each pre-funded Warrant having an exercise price of \$0.001 per share of Common Stock. The exercise prices of the GEO Pre-Funded Warrants are subject to certain adjustments per the Form of Pre-Funded Warrant. The GEO Pre-Funded Warrants are exercisable at the option of GEO at any time after their issuance; provided, that the GEO Pre-Funded Warrants carry a limitation on exercise preventing GEO from exercise if such exercise results in GEO beneficially owning in excess of 9.99% of the number of shares of the Issuer's Common Stock, which percentage can be increased or decreased at the option of GEO upon 61 days prior notice however not to exceed 19.99% (the "Pre-Funded Warrant Beneficial Ownership Limitation").

GEO now owns a total of 14,986,793 shares of the Issuer's Common Stock and a right, upon exercise of the GEO Pre-Funded Warrants, GEO Class C Warrants and/or the GEO Warrants and taking into account their repspective beneficial ownership limitations, to purchase up to 755,999 shares of the Issuer's Common Stock (the "Excercisable Shares") for a total deemed ownership of 15,742,792 shares of Common Stock (the "GEO Shares").

The working capital of GEO is the source of the funds for the purchase of the GEO Shares. No part of the purchase price of the GEO Shares is represented by funds or other consideration borrowed or otherwise obtained for the purpose of acquiring, holding, trading or voting the GEO Shares.

#### Item 4. Purpose of Transaction.

GEO agreed to acquire the GEO Shares for investment purposes. Depending on market conditions, its continuing evaluation of the business and prospects of the Issuer and other factors, GEO and other Reporting Persons may dispose of or acquire additional shares of the Issuer. Except as set forth above, none of the Reporting Persons has 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 Securities Exchange Act of 1934; or
- (j) Any action similar to any of those enumerated above.

#### Item 5. Interest in Securities of the Issuer.

(a) GEO is the record owner of the GEO Shares. As the sole member of GEO, NEA 18 VGE may be deemed to own beneficially the GEO Shares. As the general partner of NEA 18 VGE, NEA Partners 18 VGE may be deemed to own beneficially the GEO Shares. As the sole general partner of NEA Partners 18 VGE, NEA 18 VGE LLC may be deemed to own beneficially the GEO Shares. As members of NEA 18 VGE LLC, each of the Managers may be deemed to own beneficially the GEO Shares.

Each Reporting Person disclaims beneficial ownership of the GEO 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 157,484,533 shares of Common Stock, which includes: the sum of (i) 122,207,488 shares of Common Stock reported by the Issuer to be outstanding as of May 1, 2023 on the Issuer's Form 10-Q, filed with the Securities and Exchange Commission (the "SEC") on May 4, 2023, (ii) 34,521,046 shares of Common Stock reported to be sold by the Issuer in connection with the Private Placement on the Issuer's Form 8-K, filed with the SEC on May 16, 2023 and (iii) the Exercisable Shares.

- (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 as set forth in Item 3 above, none of the Reporting Persons has effected any transaction in the Common Stock during the last 60 days.
- (d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, Common Stock beneficially owned by any of the Reporting Persons.
- (e) Each of Sonsini and Landsman has ceased to own beneficially five percent (5%) or more of the Issuer's Common Stock as a result of ceasing to be a manager of NEA 18 VGE LLC.

# Item 7. Material to Be Filed as Exhibits.

- Exhibit 1 Agreement regarding filing of joint Schedule 13D.
- Exhibit 2 Power of Attorney regarding filings under the Securities Exchange Act of 1934, as amended.
- Exhibit 3 Power of Attorney on behalf of Liza Landsman regarding filings under the Securities Exchange Act of 1934, as amended.

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# **SIGNATURE**

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

EXECUTED this 26<sup>th</sup> day of May, 2023.

GROWTH EQUITY OPPORTUNITIES 18 VGE, LLC

By: NEA 18 VENTURE GROWTH EQUITY, L.P.

Sole Member

By: NEA PARTNERS 18 VGE, L.P.

General Partner

By: NEA 18 VGE GP, LLC

General Partner

By: \*
Scott D. Sandell

Chief Executive Officer

NEA 18 VENTURE GROWTH EQUITY, L.P.

By: NEA PARTNERS 18 VGE, L.P.

General Partner

By: NEA 18 VGE GP, LLC

General Partner

By: \*
Scott D. Sandell

Chief Executive Officer

NEA PARTNERS 18 VGE, L.P.

By: NEA 18 VGE GP, LLC

General Partner

By: \*
Scott D. Sandell

Chief Executive Officer

NEA 18 VGE GP, LLC

By: \_\_\_\_\* Scott D. Sandell

Chief Executive Officer

\*
Ali Behbahani

\*
Carmen Chang

\*
Anthony A. Florence, Jr.

\*
Liza Landsman

\*
Mohamad H. Makhzoumi

\*
Edward T. Mathers

\*
Scott D. Sandell

\*
Peter W. Sonsini

\*
Paul Walker

Rick Yang

\*/s/ Louis S. Citron
Louis S. Citron
As attorney-in-fact

This Amendment No. 2 to Schedule 13D was executed by Louis S. Citron on behalf of the individuals listed above pursuant to a Power of Attorney a copy of which is attached as Exhibit 2.

# **EXHIBIT 1**

# **AGREEMENT**

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of shares of stock of X4 Pharmaceuticals, Inc.

EXECUTED this 26<sup>th</sup> day of May, 2023.

GROWTH EQUITY OPPORTUNITIES 18 VGE, LLC

By: NEA 18 VENTURE GROWTH EQUITY, L.P.

Sole Member

By: NEA PARTNERS 18 VGE, L.P.

General Partner

By: NEA 18 VGE GP, LLC

General Partner

By: \*
Scott D. Sandell

Chief Executive Officer

NEA 18 VENTURE GROWTH EQUITY, L.P.

By: NEA PARTNERS 18 VGE, L.P.

General Partner

By: NEA 18 VGE GP, LLC

General Partner

By: \*
Scott D. Sandell

Scott D. Sandell Chief Executive Officer

NEA PARTNERS 18 VGE, L.P.

By: NEA 18 VGE GP, LLC

General Partner

By: \*
Scott D. Sandell

Chief Executive Officer

NEA 18 VGE GP, LLC

By: \*
Scott D. Sandell

Chief Executive Officer

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Edward T. Mathers

Scott D. Sandell

Peter W. Sonsini

Paul Walker

\* Rick Yang

\*/s/ Louis S. Citron
Louis S. Citron
As attorney-in-fact

This Agreement relating to Schedule 13D was executed by Louis S. Citron on behalf of the individuals listed above pursuant to a Power of Attorney a copy of which is attached hereto as Exhibit 2.

**EXHIBIT 2** 

# POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Louis S. Citron, Timothy Schaller, Sasha Keough and Stephanie Brecher, and each of them, with full power to act without the others, his or her true and lawful attorney-in-fact, with full power of substitution, to 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 or her capacity as a direct or indirect general partner, director, officer or manager of any partnership, corporation or limited liability company, pursuant to section 13 or 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and with any other entity when and if such is mandated by the Exchange Act or by the Financial Industry Regulatory Authority, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as he or she might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or his or her substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 13th day of March, 2017.

/s/ M. James Barrett
M. James Barrett
/s/ Peter J. Barris
Peter J. Barris
/a/ Farrat Daalast
<u>/s/ Forest Baskett</u> Forest Baskett
rorest Daskett
/s/ Ali Behbahani
Ali Behbahani
/s/ Colin Bryant
Colin Bryant
lel Carmon Chang
<u>/s/ Carmen Chang</u> Carmen Chang
Carmen Chang
/s/ Anthony A. Florence, Jr.
Anthony A. Florence, Jr.
/s/ Carol G. Gallagher
Carol G. Gallagher
/s/ Dayna Grayson
Dayna Grayson
Zajila Grajoon
/s/ Patrick J. Kerins
Patrick J. Kerins
/s/ P. Justin Klein
P. Justin Klein

/s/ Joshua Makower Joshua Makower  /s/ Mohamad H. Makhzoumi Mohamad H. Makhzoumi /s/ Edward T. Mathers Edward T. Mathers Edward T. Mathers  /s/ David M. Mott David M. Mott David M. Mott Sara M. Nayeem Sara M. Nayeem Sara M. Nunn Jason R. Nunn Jason R. Nunn Jason R. Nunn /s/ Gregory Papadopoulos Gregory Papadopoulos /s/ Chetan Puttagunta Chetan Puttagunta /s/ Jon Sakoda Jon Sakoda /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell /s/ A. Brooke Seawell A. Brooke Seawell /s/ Peter W. Sonsini Peter W. Sonsini /s/ Melissa Taunton Melissa Taunton Melissa Taunton /s/ Frank M. Torti /s/ Ravi Viswanathan Ravi Viswanathan Ravi Viswanathan Ravi Viswanathan Ravi Faul E. Walker Paul E. Walker	<u>/s/ Vanessa Larco</u> Vanessa Larco
Mohamad H. Makhzoumi  /s/ Edward T. Mathers Edward T. Mathers  /s/ David M. Mott David M. Mott  /s/ Sara M. Nayeem Sara M. Nayeem Sara M. Nayeem  /s/ Jason R. Nunn Jason R. Nunn  /s/ Gregory Papadopoulos Gregory Papadopoulos  /s/ Chetan Puttagunta Chetan Puttagunta Chetan Puttagunta  /s/ Jon Sakoda Jon Sakoda Jon Sakoda Jon Sakoda  /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell A. Brooke Seawell A. Brooke Seawell A. Brooke Seawell /s/ Peter W. Sonsini Peter W. Sonsini /s/ Melissa Taunton Melissa Taunton /s/ Frank M. Torti Frank M. Torti /s/ Ravi Viswanathan Ravi Viswanathan Ravi Viswanathan /s/ Paul E. Walker Paul E. Walker	
/s/ David M. Mott David M. Mott /s/ Sara M. Nayeem Sara M. Nayeem /s/ Jason R. Nunn Jason R. Nunn /s/ Gregory Papadopoulos Gregory Papadopoulos /s/ Chetan Puttagunta Chetan Puttagunta Chetan Puttagunta /s/ Jon Sakoda Jon Sakoda Jon Sakoda Jon Sakoda /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell A. Brooke Seawell A. Brooke Seawell A. Brooke Seawell /s/ Peter W. Sonsini Peter W. Sonsini /s/ Melissa Taunton Melissa Taunton /s/ Frank M. Torti Frank M. Torti Frank M. Torti /s/ Ravi Viswanathan Ravi Viswanathan Ravi Viswanathan /s/ Paul E. Walker Paul E. Walker	
David M. Mott  /s/ Sara M. Nayeem Sara M. Nayeem Sara M. Nayeem  /s/ Jason R. Nunn Jason R. Nunn  /s/ Gregory Papadopoulos Gregory Papadopoulos  /s/ Chetan Puttagunta Chetan Puttagunta Chetan Puttagunta /s/ Jon Sakoda Jon Sakoda  /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell A. Brooke Seawell A. Brooke Seawell A. Brooke Seawell /s/ Peter W. Sonsini Peter W. Sonsini Peter W. Sonsini /s/ Melissa Taunton Melissa Taunton /s/ Frank M. Torti Frank M. Torti Frank M. Torti /s/ Ravi Viswanathan Ravi Viswanathan /s/ Paul E. Walker Paul E. Walker	<u>/s/ Edward T. Mathers</u> Edward T. Mathers
Sara M. Nayeem  /s/ Jason R. Nunn Jason R. Nunn  /s/ Gregory Papadopoulos Gregory Papadopoulos  /s/ Chetan Puttagunta Chetan Puttagunta Chetan Puttagunta  /s/ Jon Sakoda  Jon Sakoda  /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell  Scott D. Sandell  /s/ A. Brooke Seawell  A. Brooke Seawell  A. Brooke Seawell  /s/ Peter W. Sonsini Peter W. Sonsini Peter W. Sonsini /s/ Melissa Taunton Melissa Taunton  /s/ Frank M. Torti Frank M. Torti Frank M. Torti /s/ Ravi Viswanathan Ravi Viswanathan  /s/ Paul E. Walker Paul E. Walker	/s/ David M. Mott David M. Mott
Jason R. Nunn  /s/ Gregory Papadopoulos Gregory Papadopoulos  /s/ Chetan Puttagunta Chetan Puttagunta  /s/ Jon Sakoda  Jon Sakoda  /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell  /s/ A. Brooke Seawell  A. Brooke Seawell  A. Brooke Seawell  /s/ Peter W. Sonsini Peter W. Sonsini Peter W. Sonsini  /s/ Melissa Taunton  Melissa Taunton  /s/ Frank M. Torti Frank M. Torti  Frank M. Torti  /s/ Ravi Viswanathan  Ravi Viswanathan  /s/ Paul E. Walker  Paul E. Walker  /s/ Rick Yang	/s/ Sara M. Nayeem Sara M. Nayeem
Gregory Papadopoulos  /s/ Chetan Puttagunta Chetan Puttagunta Chetan Puttagunta  /s/ Jon Sakoda Jon Sakoda  Jon Sakoda  /s/ Scott D. Sandell Scott D. Sandell  /s/ A. Brooke Seawell  A. Brooke Seawell  /s/ Peter W. Sonsini Peter W. Sonsini  /s/ Melissa Taunton  Melissa Taunton  /s/ Frank M. Torti Frank M. Torti Frank M. Torti  /s/ Ravi Viswanathan Ravi Viswanathan  Ravi Viswanathan  /s/ Paul E. Walker  Paul E. Walker	
Chetan Puttagunta  /s/ Jon Sakoda Jon Sakoda Jon Sakoda  /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell  /s/ A. Brooke Seawell A. Brooke Seawell  /s/ Peter W. Sonsini Peter W. Sonsini  /s/ Melissa Taunton  Melissa Taunton  /s/ Frank M. Torti Frank M. Torti Frank M. Torti  /s/ Ravi Viswanathan Ravi Viswanathan  Ravi Viswanathan  /s/ Paul E. Walker  Paul E. Walker	
Jon Sakoda  /s/ Scott D. Sandell Scott D. Sandell Scott D. Sandell  /s/ A. Brooke Seawell A. Brooke Seawell  /s/ Peter W. Sonsini Peter W. Sonsini  /s/ Melissa Taunton  Melissa Taunton  /s/ Frank M. Torti Frank M. Torti  Frank M. Torti  /s/ Ravi Viswanathan  Ravi Viswanathan  Ravi Viswanathan  /s/ Paul E. Walker  Paul E. Walker	/s/ Chetan Puttagunta Chetan Puttagunta
Scott D. Sandell  /s/ A. Brooke Seawell A. Brooke Seawell /s/ Peter W. Sonsini Peter W. Sonsini /s/ Melissa Taunton Melissa Taunton /s/ Frank M. Torti Frank M. Torti Frank M. Torti /s/ Ravi Viswanathan Ravi Viswanathan /s/ Paul E. Walker Paul E. Walker /s/ Rick Yang	
A. Brooke Seawell  /s/ Peter W. Sonsini Peter W. Sonsini  /s/ Melissa Taunton  Melissa Taunton  /s/ Frank M. Torti Frank M. Torti  /s/ Ravi Viswanathan  Ravi Viswanathan  /s/ Paul E. Walker  Paul E. Walker  /s/ Rick Yang	/s/ Scott D. Sandell Scott D. Sandell
Peter W. Sonsini  /s/ Melissa Taunton  Melissa Taunton  /s/ Frank M. Torti  Frank M. Torti  /s/ Ravi Viswanathan  Ravi Viswanathan  /s/ Paul E. Walker  Paul E. Walker  /s/ Rick Yang	
Melissa Taunton  /s/ Frank M. Torti Frank M. Torti  /s/ Ravi Viswanathan Ravi Viswanathan  /s/ Paul E. Walker Paul E. Walker  /s/ Rick Yang	/s/ Peter W. Sonsini Peter W. Sonsini
Frank M. Torti  /s/ Ravi Viswanathan Ravi Viswanathan  /s/ Paul E. Walker Paul E. Walker  /s/ Rick Yang	
Ravi Viswanathan  /s/ Paul E. Walker  Paul E. Walker  /s/ Rick Yang	/s/ Frank M. Torti Frank M. Torti
Paul E. Walker /s/ Rick Yang	
	/s/ Rick Yang Rick Yang

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**EXHIBIT 3** 

#### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Louis S. Citron, Timothy Schaller, Sasha Keough and Stephanie Brecher, and each of them, with full power to act without the others, her true and lawful attorney-in-fact, with full power of substitution, to sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of herself as an individual or in her capacity as a direct or indirect general partner, director, officer or manager of any partnership, corporation or limited liability company, pursuant to section 13 or 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and with any other entity when and if such is mandated by the Exchange Act or by the Financial Industry Regulatory Authority, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as she might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or her substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 1st day of April, 2020.

<u>/s/ Liza Landsman</u> Liza Landsman