
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

X4 Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

98420X202

(CUSIP Number)

08/11/2025

(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. 98420X202

Names of Reporting Persons

1

Trails Edge Capital Partners, LP

Check the appropriate box if a member of a Group (see instructions)

2

(a)

(b)

3

Sec Use Only

Citizenship or Place of Organization

4

DELAWARE

Number of Shares 5 Sole Voting Power

Beneficially 2,317,153.00
Owned by Shared Voting Power
Each 6
Reporting 0.00
Person
With: Sole Dispositive Power
7
2,317,153.00
Shared Dispositive
8 Power
0.00

Aggregate Amount Beneficially Owned by Each Reporting Person

9
2,317,153.00
Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

10

Percent of class represented by amount in row (9)

11
9.9 %

12
Type of Reporting Person (See Instructions)
IA, PN

Comment for Type of Reporting Person: See Item 4 for additional information.

SCHEDULE 13G

CUSIP No. 98420X202

Names of Reporting Persons

1
Trails Edge Biotechnology Master Fund, LP
Check the appropriate box if a member of a Group (see instructions)

2
 (a)
 (b)

3
Sec Use Only
Citizenship or Place of Organization

4
CAYMAN ISLANDS

Sole Voting Power
5

Number of 2,317,153.00
Shares Shared Voting Power
Beneficially 6
Owned by 0.00
Each Sole Dispositive Power
Reporting 7
Person 2,317,153.00
With: Shared Dispositive
8 Power
0.00

Aggregate Amount Beneficially Owned by Each Reporting Person

9
2,317,153.00
Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

10

11 Percent of class represented by amount in row (9)

9.9 %

Type of Reporting Person (See Instructions)

12

PN

Comment for Type of Reporting Person: See Item 4 for additional information.

SCHEDULE 13G

CUSIP No. 98420X202

Names of Reporting Persons

1

Ortav Yehudai

Check the appropriate box if a member of a Group (see instructions)

2

(a)

(b)

3

Sec Use Only

Citizenship or Place of Organization

4

UNITED STATES

Sole Voting Power

5

2,317,153.00

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person
With:

Shared Voting Power

6

0.00

Sole Dispositive Power

7

2,317,153.00

Shared Dispositive

8

Power

0.00

Aggregate Amount Beneficially Owned by Each Reporting Person

9

2,317,153.00

Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

10

Percent of class represented by amount in row (9)

11

9.9 %

Type of Reporting Person (See Instructions)

12

IN

Comment for Type of Reporting Person: See Item 4 for additional information.

SCHEDULE 13G

Item 1.

Name of issuer:

(a)

X4 Pharmaceuticals, Inc.

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

61 North Beacon Street, 4th Floor, Boston, Massachusetts 02134

Item 2.

Name of person filing:

(a) This report on Schedule 13G is being filed by Trails Edge Capital Partners, LP, a Delaware limited partnership ("Trails Edge Capital"). Trails Edge Capital is the investment manager to Trails Edge Biotechnology Master Fund, LP, a Cayman Islands limited partnership ("Trails Edge Biotechnology") and Ortav Yehudai ("Mr. Yehudai"), the Chief Investment Officer of Trails Edge Capital. Each of Trails Edge Capital, Trails Edge Biotechnology and Mr. Yehudai are referred to individually as a "Filer" and collectively as the "Filers".

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

(b) The address for each Filer is 3455 Peachtree Road NE, 5th Floor, Atlanta, GA 30326.

Citizenship:

(c) See Item 4 of the cover page of each Filer.

Title of class of securities:

(d) Common Stock, par value \$0.001 per share

CUSIP No.:

(e) 98420X202

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) As of August 11, 2025, each Filer may be deemed to beneficially own an aggregate of 2,317,153 shares of common stock (the "Common Stock"), par value \$0.001 (the "Shares"), of X4 Pharmaceuticals, Inc. (the "Issuer"). The 2,317,153 Shares reported as beneficially owned on this Schedule 13G by each Filer consists of the following: (i) 1,571,478 Shares held directly by Trails Edge Biotechnology, and (ii) 745,675 Shares underlying prefunded warrants (the "Warrants") held directly by Trails Edge Biotechnology. The securities beneficially owned by each Filer excludes 1,910,069 Shares underlying Warrants which contain an issuance limitation that prohibits the holder from exercising the Warrants to the extent that after giving effect to such issuance after the exercise, the holder (together with the holder's affiliates and any other persons acting as a group together with the holder or any of the holder's affiliates, including the other Filers) would beneficially own in excess of 9.99% of the Shares outstanding immediately after giving effect to the issuance of the Shares issuable upon exercise of the Warrants. As a result, Trails Edge Biotechnology beneficially owns 9.9% of the outstanding Shares of the Issuer as of August 11, 2025 (the "Event Date"). Trails Edge Capital, as the investment manager to Trails Edge Biotechnology, may be deemed to beneficially own these securities. Mr. Yehudai, as the Chief Investment Officer of Trails Edge Capital, exercises voting and investment discretion with respect to these securities and as such may be deemed to beneficially own 9.9% of the outstanding Shares of the Issuer as of the Event Date. Ownership percentages are based on (i) 11,408,357 shares of Common Stock issued and outstanding as of August 4, 2025, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2025, filed with the Securities and Exchange Commission on August 8, 2025, and (ii) 11,040,776 shares of Common Stock issued subsequent to August 4, 2025 as disclosed by the Issuer.

(b) Percent of class:

9.9% %

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

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

2,317,153

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

0

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

2,317,153

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

0

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.

Trails Edge Capital Partners, LP

Signature: By: Trails Edge Capital Partners, LLC, GP of
Trails Edge Capital Partners, LP /s/ Ortav Yehudai
Name/Title: Ortav Yehudai / Chief Investment Officer of
Trails Edge Capital Partners, LLC
Date: 08/18/2025

Trails Edge Biotechnology Master Fund, LP

Signature: By: Trails Edge GP, LLC, GP of Trails Edge
Biotechnology Fund GP, LP, GP of Trails Edge
Biotechnology Master Fund, LP /s/ Ortav Yehudai
Name/Title: Ortav Yehudai / Chief Investment Officer of
Trails Edge GP, LLC
Date: 08/18/2025

Ortav Yehudai

Signature: /s/ Ortav Yehudai
Name/Title: Ortav Yehudai / Individual
Date: 08/18/2025

Exhibit Information

Exhibit 1 - Joint Filing Agreement

JOINT FILING AGREEMENT

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned, and that all subsequent amendments to this statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint acquisition statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the other, except to the extent that it knows or has reason to believe that such information is inaccurate.

Dated: August 18, 2025

Trails Edge Capital Partners, LP

By: Trails Edge Capital Partners, LLC, the general partner of Trails Edge Capital Partners, LP

By: /s/ Ortav Yehudai
Name: Ortav Yehudai
Title: Chief Investment Officer

Trails Edge Biotechnology Master Fund, LP

By: Trails Edge GP, LLC, the general partner of Trails Edge Biotechnology Fund GP, LP, the general partner of Trails Edge Biotechnology Master Fund, LP

By: /s/ Ortav Yehudai
Name: Ortav Yehudai
Title: Chief Investment Officer

Ortav Yehudai

/s/ Ortav Yehudai
