

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

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**SCHEDULE 14A**

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**Proxy Statement Pursuant to Section 14(a) of the  
Securities Exchange Act of 1934  
(Amendment No. 1)**

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Filed by the Registrant                       Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to § 240.14a-12

**X4 Pharmaceuticals, Inc.**

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of filing Fee (Check the appropriate box):

- No fee required.
- 
- Fee paid previously with preliminary materials.
  - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rule 14a-6(i)(1) and 0-11

**SUPPLEMENT TO PROXY STATEMENT  
FOR THE ANNUAL MEETING OF STOCKHOLDERS  
TO BE HELD ON JUNE 13, 2023**

This Supplement provides updated information with respect to the 2023 Annual Meeting of Stockholders (the “Annual Meeting”) of X4 Pharmaceuticals, Inc. (the “Company”) to be held on June 13, 2023.

The Company filed its Definitive Proxy Statement on Schedule 14A relating to the Annual Meeting (the “Proxy Statement”) with the Securities and Exchange Commission on April 25, 2023. On pages 1 and 6 of the Proxy Statement, the number of shares outstanding and entitled to vote as of the record date, April 18, 2023, is corrected from 121,207,488 to 122,207,488. In addition, on page 6 of the Proxy Statement, the number of shares that must be present in person or represented by proxy at the Annual Meeting in order to have a quorum is corrected from 60,603,745 to 61,103,745.

We are filing these additional materials (the “Additional Materials”) to correct these errors. The Additional Materials should be read together with the Proxy Statement. Except as described herein, the Additional Materials do not amend, replace, supplement or otherwise affect the Proxy Statement or the information contained therein.

Information on how to vote your shares, or change or revoke your prior vote or voting instruction, is available in the Proxy Statement.