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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): February 27, 2026

XENON PHARMACEUTICALS INC.

(Exact name of Registrant as Specified in Its Charter)

Canada
(State or Other Jurisdiction
of Incorporation)

001-36687
(Commission File Number)

98-0661854
(IRS Employer
Identification No.)

200-3650 Gilmore Way
Burnaby, British Columbia, Canada
(Address of Principal Executive Offices)

V5G 4W8
(Zip Code)

Registrant's Telephone Number, Including Area Code: (604) 484-3300

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, without par value	XENE	The Nasdaq Stock Market LLC (The Nasdaq Global Market)

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events

On February 27, 2026, Xenon Pharmaceuticals Inc. (the “Company”) filed a prospectus supplement (the “Prospectus Supplement”) with the Securities and Exchange Commission (the “SEC”) to register \$400,000,000 of common shares, without par value (the “Shares”) issuable pursuant to the at-the-market equity offering sales agreement, dated August 6, 2020, as amended on March 1, 2022 (the “Sales Agreement”), by and among the Company, Jefferies LLC (“Jefferies”) and Stifel, Nicolaus & Company, Incorporated (“Stifel” and together with Jefferies, the “Sales Agents”). As of the date hereof, the Company has sold \$291,084,564 in Shares under the Sales Agreement and pursuant to a prior prospectus (the “Prior Prospectus”). The Prospectus Supplement is being filed to replace and supersede the Prior Prospectus in its entirety and the offering pursuant to the Prior Prospectus has been terminated. An opinion regarding the legality of the Shares issuable under the ATM Agreement and registered pursuant to the Prospectus Supplement is filed as Exhibit 5.1 to this Current Report on Form 8-K.

The issuance and sale of the Shares by the Company under the Sales Agreement will be made pursuant to the Company’s automatically effective registration statement on Form S-3 (File No. 333-281451) filed with the SEC on August 9, 2024 (the “Registration Statement”) and a base prospectus dated August 9, 2024 included in the Registration Statement, as supplemented by the Prospectus Supplement.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
5.1	Opinion of Blake, Cassels & Graydon LLP.
23.1	Consent of Blake, Cassels & Graydon LLP (contained in Exhibit 5.1).
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

XENON PHARMACEUTICALS INC.

Date: February 27, 2026

By: /s/ Thomas P. Kelly
Thomas P. Kelly
Chief Financial Officer



Blake, Cassels & Graydon LLP
Barristers & Solicitors
Patent & Trademark Agents
1133 Melville Street
Suite 3500, The Stack
Vancouver, B.C. V6E 4E5 Canada
Tel: 604-631-3300 Fax: 604-631-3309

Exhibit 5.1

February 27, 2026

Reference:191296/1

Xenon Pharmaceuticals Inc.
200 – 3650 Gilmore Way
Burnaby, BC V5G 4W8
Canada

RE: At-the-Market Equity Offering Program of Xenon Pharmaceuticals Inc.

We have acted as Canadian counsel to Xenon Pharmaceuticals Inc. (the “**Company**”), a corporation continued under the federal laws of Canada, in connection with the offer and sale by the Company of up to US\$400,000,000 of common shares in the capital of the Company (the “**Shares**”) pursuant to a Registration Statement on Form S-3 (Registration No. 333-281451) (the “**Registration Statement**”) filed by the Company with the U.S. Securities and Exchange Commission (the “**SEC**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), the prospectus included in the Registration Statement (the “**Base Prospectus**”), and the prospectus supplement related to the Shares to be filed by the Company with the SEC on February 27, 2026 pursuant to Rule 424(b)(5) promulgated under the Securities Act (together with the Base Prospectus, the “**Prospectus**”).

The offer and sale of the Shares is being made pursuant to that certain at-the-market equity offering sales agreement (the “**Sales Agreement**”), dated as of August 6, 2020, as amended March 1, 2022, by and between the Company, Jefferies LLC and Stifel, Nicolaus & Company, Incorporated.

In connection with giving this opinion, we have examined the Registration Statement (including exhibits thereto) and the Prospectus. We have also examined originals, certified or otherwise identified to our satisfaction, of such public and corporate records, certificates, instruments and other documents as we have considered necessary in order to express the opinion set out below. With respect to the accuracy of factual matters material to this opinion, we have relied upon certificates or comparable documents and representations of public officials and of officers and representatives of the Company.

In giving this opinion, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies, certified or otherwise identified to our satisfaction. We have also considered such questions of law as we have deemed relevant and necessary as a basis for the opinion hereinafter expressed.

The opinion expressed herein is limited to matters governed by the laws of the Province of British Columbia and the laws of Canada applicable therein in effect on the date hereof. We express no opinion with respect to the laws of any other jurisdiction.

Based and relying upon and subject to the foregoing, we are of the opinion that the offer and sale of the Shares has been duly authorized by the Company and, when the Shares are issued and paid for in accordance with the terms of the Sales Agreement, the Shares will be validly issued, fully paid and non-assessable shares in the capital of the Company.

We hereby consent to the reference to our firm under the caption “*Legal Matters*” in the Prospectus and to the filing of this opinion letter as an exhibit to a Current Report on Form 8-K to be filed by the Company with the SEC for incorporation by reference into the Registration Statement.

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This opinion is effective as at the date hereof and is based upon laws in effect and facts in existence as at the date hereof. We express no opinion as to the effect of future laws or judicial decisions on the subject matter hereof, nor do we undertake any duty to modify this opinion to reflect subsequent facts or developments concerning the Company or developments in the law occurring after the date hereof.

Yours truly,

/s/ Blake, Cassels & Graydon LLP

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