

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

**FORM S-3
REGISTRATION STATEMENT**
*Under
The Securities Act of 1933*

XENON PHARMACEUTICALS INC.

(Exact name of Registrant as specified in its charter)

Canada
(State or other jurisdiction of
incorporation or organization)

98-0661854
(I.R.S. Employer
Identification Number)

**3650 Gilmore Way
Burnaby, British Columbia V5G 4W8 Canada
(604) 484-3300**
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Ian C. Mortimer
President and Chief Executive Officer
Xenon Pharmaceuticals Inc.
3650 Gilmore Way
Burnaby, British Columbia V5G 4W8 Canada
(604) 484 - 3300**
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Approximate date of commencement of proposed sale to the public: **From time to time after the effective date of this Registration Statement, as the registrant shall determine.**

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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 7(a)(2)(B) of the Securities Act.

EXPLANATION OF THE FILING

Xenon Pharmaceuticals Inc. is submitting this filing to replace its existing Registration Statement on Form S-3, which is due to expire in October 2024. The purpose of maintaining a shelf registration statement is to preserve a state of readiness for potential financings through the sale of securities, should the need or strategic opportunity arise. The filing of this registration statement does not guarantee the issuance and sale of any securities; it merely provides the company with the option to do so, ensuring a state of preparedness.

This registration statement contains two prospectuses:

- A base prospectus that outlines the potential offering, issuance and sale from time to time of common shares, preferred shares, warrants, and units of Xenon Pharmaceuticals Inc. The specific terms of any securities to be offered pursuant to this base prospectus will be specified in a prospectus supplement to the base prospectus.
- A sales agreement prospectus that covers the potential offering, issuance and sale from time to time of up to \$350 million of Xenon Pharmaceuticals Inc.'s common shares pursuant to a sales agreement with Jefferies LLC and Stifel, Nicolaus & Company, Incorporated.

The base prospectus immediately follows this explanatory note. The sales agreement prospectus, which specifies the terms of our common shares to be sold under the sales agreement, immediately follows the base prospectus.



Xenon Pharmaceuticals Inc.

Common Shares

Preferred Shares

Warrants

Units

We may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, any combination of the securities described in this prospectus, either individually or as units comprised of one or more of the other classes of securities.

This prospectus provides a general description of the securities we may offer. Each time we offer and sell securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. A prospectus supplement and any free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement, and any related free writing prospectus, as well as the documents incorporated or deemed to be incorporated by reference in this prospectus, before you invest in any of our securities offered hereby.

This prospectus may not be used to consummate a sale of any securities unless it is accompanied by a prospectus supplement.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, broker-dealers, agents, directly to purchasers, or through any other means described in this prospectus under “Plan of Distribution” and in supplements to this prospectus in connection with a particular offering of securities. If any underwriters, dealers or agents are involved in the sale of any of these securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common shares are listed on The Nasdaq Global Market, or Nasdaq, under the symbol “XENE.” On August 8, 2024, the last reported sale price of our common shares on Nasdaq was \$41.01 per share. There is currently no market for the other securities we may offer; however, we will provide information in any applicable prospectus supplement regarding any listing of securities other than our common shares on any securities exchange.

INVESTING IN OUR SECURITIES INVOLVES SIGNIFICANT RISKS. PLEASE CAREFULLY READ THE INFORMATION UNDER THE HEADINGS “[RISK FACTORS](#)” BEGINNING ON PAGE 4 OF THIS PROSPECTUS AND “ITEM 1A – RISK FACTORS” OF OUR MOST RECENT REPORT ON FORM 10-K OR 10-Q THAT IS INCORPORATED BY REFERENCE IN THIS PROSPECTUS BEFORE YOU INVEST IN OUR SECURITIES.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is August 9, 2024.

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ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement that we filed with the Securities and Exchange Commission, or the SEC, as a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings. There is no limit on the aggregate amount of the securities that we may offer pursuant to the registration statement of which this prospectus forms a part. This prospectus provides you with a general description of the securities we may offer.

Each time we sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings, hereinafter referred to as an issuer free writing prospectus. The prospectus supplement and any issuer free writing prospectus may also add to, update or change information contained in the prospectus and, accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement or the issuer free writing prospectus, as applicable. You should carefully read this prospectus, any prospectus supplement, and any issuer free writing prospectus, together with the additional information described under the heading “Information Incorporated by Reference.”

The prospectus supplement to be attached to the front of this prospectus may describe, as applicable, the terms of the securities offered; the initial price to the public; the price paid for the securities; net proceeds; and the other specific terms related to the offering of the securities.

THIS PROSPECTUS MAY NOT BE USED TO OFFER AND SELL SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement or issuer free writing prospectus relating to a particular offering. No person has been authorized to give any information or make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus, any accompanying prospectus supplement and any related issuer free writing prospectus in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither this prospectus nor any prospectus supplement nor any related issuer free writing prospectus shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits.

You should read the entire prospectus and any prospectus supplement and any related issuer free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement or any related issuer free writing prospectus, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement or any issuer free writing prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement or issuer free writing prospectus is correct as of any date subsequent to the date hereof or of such prospectus supplement or issuer free writing prospectus, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement, any issuer free writing prospectus, or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

PROSPECTUS SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere, or incorporated by reference, in this prospectus. It does not contain all of the information that may be important to you and your investment decision. Before investing in our securities, you should carefully read this entire prospectus, including the matters set forth under the section of this prospectus captioned “Risk Factors” and the financial statements and related notes and other information that we incorporate by reference herein, including our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q. Unless the context indicates otherwise, references in this prospectus to “Xenon Pharmaceuticals Inc.,” “we,” “our” and “us” refer, collectively, to Xenon Pharmaceuticals Inc. and its wholly-owned subsidiary.

Overview

We are a neuroscience-focused biopharmaceutical company dedicated to discovering, developing, and commercializing innovative therapeutics to improve the lives of people living with neurological and psychiatric disorders. We are advancing a novel product pipeline to address areas of high unmet medical need, including epilepsy and depression.

Our pipeline includes:

- **Azetukalner** - Azetukalner (XEN1101), our lead Kv7 channel opener, represents the most advanced, clinically validated potassium channel modulator in late-stage clinical development for multiple indications. Azetukalner is a novel, potent Kv7 potassium channel opener being developed for the treatment of epilepsy, including focal onset seizures and primary generalized tonic-clonic seizures, as well as major depressive disorder, and we are exploring applicability in other neuropsychiatric disorders.
- **Next Generation Ion Channel Modulators** - As leaders in the small molecule ion channel space, we continue to leverage our extensive expertise to discover and develop potassium and sodium channel therapeutics. We are evaluating multiple therapeutic candidates targeting Kv7, Nav1.7, and Nav1.1 across various indications.
- **Partnered Program** - We have an ongoing collaboration with Neurocrine Biosciences to develop treatments for epilepsy that includes an exclusive license to NBI-921352 (formerly XEN901), currently in clinical development for an orphan pediatric epilepsy (SCN8A-DEE), as well as an exclusive license to other pre-clinical compounds, including a Nav1.2/1.6 inhibitor in pre-clinical studies as a potential treatment for focal onset seizures.

In addition to current product candidates in development and our partnered program, we intend to expand our pipeline from our internal research efforts and may expand our pipeline through the acquisition or in-licensing of other product candidates.

Corporate Information

We were incorporated in the Province of British Columbia on November 5, 1996 under the predecessor to the Business Corporations Act (British Columbia) under the name “Xenon Bioreserach Inc.” We continued from British Columbia to the federal jurisdiction pursuant to Section 187 of the Canada Business Corporations Act, or the CBCA, on May 17, 2000 and concurrently changed our name to “Xenon Genetics Inc.” We registered as an extra-provincial company in British Columbia on July 10, 2000 and changed our name to “Xenon Pharmaceuticals Inc.” on August 24, 2004. We have one wholly-owned subsidiary, Xenon Pharmaceuticals USA Inc., which was incorporated in Delaware on December 2, 2016. Our principal executive offices are located at 3650 Gilmore Way, Burnaby, British Columbia, Canada V5G 4W8, and our telephone number is (604) 484-3300. Our website address is <http://www.xenon-pharma.com>. The information on, or that can be accessed through, our website is not incorporated by reference into this prospectus and should not be considered to be a part of this prospectus.

“Xenon,” the Xenon logo and other trademarks or service marks of Xenon appearing in this prospectus are trademarked and are the property of Xenon Pharmaceuticals Inc. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

The Securities We May Offer

We may offer and sell common shares, preferred shares, warrants and/or units in one or more offerings and in any combination, either individually or as units comprised of one or more of the other classes of securities. This prospectus provides you with a general description of the securities we may offer. A prospectus supplement, which we will provide each time we offer securities, will describe the specific amounts, prices and terms of these securities.

We may sell the securities to or through underwriters, dealers or agents or directly to purchasers or as otherwise set forth in the section of this prospectus captioned "Plan of Distribution." We, as well as any agents acting on our behalf, reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. Each prospectus supplement will set forth the names of any underwriters, dealers, agents or other entities involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

Common Shares

Each holder of one common share is entitled to one vote for each common share on all matters submitted to a vote of the shareholders, including the election of directors. There are no cumulative voting rights. Subject to preferences that may be applicable to any then outstanding preferred shares, holders of common shares are entitled to receive ratably those dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of common shares will be entitled to share ratably in the net assets legally available for distribution to shareholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding preferred shares.

Preferred Shares

Our board of directors has the authority, without further action by the shareholders, to issue an unlimited number of preferred shares in one or more series. Subject to the provisions of the CBCA, our board of directors has the discretion to determine the rights, preferences, privileges, restrictions and conditions, including, among others, dividend rights, conversion rights, voting rights, redemption rights, and liquidation preference of each series of preferred shares.

Each series of preferred shares will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or winding up, dividend and voting rights and rights to convert into common shares. No rights, privileges, restrictions or conditions attached to a series of preferred shares shall confer on a series a priority in respect of dividends or return of capital over any other series of preferred shares that are then outstanding.

If any cumulative dividends or amounts payable on return of capital in respect of a series of preferred shares are not paid in full, all series of the preferred shares participate ratably in respect of accumulated dividends and return of capital.

Warrants

We may issue warrants for the purchase of common shares or preferred shares. We may issue warrants independently or together with other securities.

Units

We may issue units comprised of one or more of the other classes of securities issued by us as described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit.

RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading “Risk Factors” in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under “Part I—Item 1A—Risk Factors,” of our most recent Annual Report on Form 10-K and in “Part II—Item 1A—Risk Factors” in our most recent Quarterly Report on Form 10-Q, filed subsequent to such Form 10-K that are incorporated herein by reference, as may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and any prospectus supplement related to a particular offering. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain statements that constitute forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The words “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “positioned,” “potential,” “seek,” “should,” “target,” “will,” “would” and similar expressions and variations thereof are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections captioned “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” and include statements regarding the intent, belief or current expectations of our management that are subject to known and unknown risks, uncertainties and assumptions. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those projected in the forward-looking statements as a result of various factors.

Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those described in “Risk Factors”, elsewhere in this prospectus or any applicable prospectus supplement and the documents incorporated by reference in this prospectus. Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available to our management. These statements, like all statements in this prospectus, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments, except as required by law.

This prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference may also contain estimates and other information concerning our industry that are based on government and industry publications. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to these estimates. These government and industry publications generally indicate that their information has been obtained from sources believed to be reliable.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and although we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

USE OF PROCEEDS

Specific information about the use of proceeds from the specific issuance of any securities will be set forth in the applicable prospectus supplement.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common shares or any other securities. We currently anticipate that we will retain all available funds and any future earnings, if any, in the foreseeable future for use in the operation of our business and do not currently anticipate paying cash dividends in the foreseeable future. Payment of future cash dividends, if any, will be at the discretion of the board of directors, subject to applicable law and will depend on various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

DESCRIPTION OF SHARE CAPITAL

The description of our share capital is incorporated by reference to Exhibit 4.3 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on [February 29, 2024](#).

DESCRIPTION OF THE WARRANTS

We may issue warrants to purchase preferred shares or common shares. We may offer warrants separately or together with one or more additional warrants, preferred shares or common shares, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the applicable prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the expiration date of the warrants. The applicable prospectus supplement will also describe the following terms of any warrants:

- the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants are to be sold separately or with other securities as parts of units;
- whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the designation and terms of any equity securities purchasable upon exercise of the warrants;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;
- the number of common shares or preferred shares that may be purchased upon exercise of a warrant and the exercise price for the warrants;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book entry procedures, if any;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;

- if applicable, a discussion of material U.S. and Canadian federal income tax considerations;
- the anti-dilution provisions, and other provisions for changes to or adjustments in the exercise price, of the warrants, if any;
- the redemption or call provisions, if any, applicable to the warrants;
- any adjustments to the terms of the warrants resulting from the occurrence of certain events or from the entry into or consummation by us of certain transactions;
- any provisions with respect to the holder's right to require us to repurchase the warrants upon a change in control or similar event; and
- any additional terms of the warrants, including procedures and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of warrants will not be entitled:

- to vote or receive dividends;
- receive notice with respect to any meeting of shareholders for the election of our directors or any other matter; or
- exercise any rights as shareholders of us.

This summary of certain provisions of the warrants is not complete. For the terms of a particular series of warrants, you should refer to the prospectus supplement for that series of warrants and the warrant agreement for that particular series.

DESCRIPTION OF THE UNITS

We may issue units comprising two or more securities described in this prospectus in any combination. The following description sets forth certain general terms and provisions of the units that we may offer pursuant to this prospectus. The particular terms of the units and the extent, if any, to which the general terms and provisions may apply to the units so offered will be described in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the unit will have the rights and obligations of a holder of each included security. Units will be issued pursuant to the terms of a unit agreement, which may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date. A copy of the forms of the unit agreement and the unit certificate relating to any particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you. For more information on how you can obtain copies of the forms of the unit agreement and the related unit certificate, see the section of this prospectus captioned "Where You Can Find More Information."

The prospectus supplement relating to any particular issuance of units will describe the terms of those units, including, to the extent applicable, the following:

- the designation and terms of the units and the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provision for the issuance, payment, settlement, transfer or exchange of the units or the securities comprising the units;
- a discussion of material U.S. and Canadian federal income tax considerations, if applicable; and
- whether the units will be issued in fully registered or global form.

PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (1) to or through underwriters or dealers, (2) directly to purchasers, including our affiliates, (3) through agents, or (4) through a combination of any these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices.

The prospectus supplement relating to any offering will include the following information:

- the terms of the offering;
- the names of any underwriters or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- the net proceeds from the sale of the securities;
- any delayed delivery arrangements
- any underwriting discounts, commissions or agency fees and other items constituting underwriters' or agents' compensation;
- any initial price to public;
- any exchanges on which the securities will be listed;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any commissions paid to agents.

In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;
- ordinary brokerage transactions and transactions in which a broker solicits purchasers; or
- privately negotiated transactions.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4) in the manner described below under “—At-the-Market Offerings.”

Sales through Underwriters or Dealers

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them (other than any securities purchased upon exercise

of any option to purchase additional securities). In connection with any offering of securities pursuant to this prospectus, underwriters may have an option to purchase additional securities from us. We will provide information regarding any such option to purchase additional securities from us in the applicable prospectus supplement. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers. The prospectus supplement will include the names of the principal underwriters the respective amount of securities underwritten, the nature of the obligation of the underwriters to take the securities and the nature of any material relationship between an underwriter and us.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities offered pursuant to this prospectus.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

Direct Sales and Sales through Agents

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved. Such securities may also be sold through agents designated from time to time. The applicable prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent by us. Unless otherwise indicated in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in the prospectus supplement.

Delayed Delivery Contracts

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery.

The underwriters and other persons acting as agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

At-the-Market Offerings

To the extent that we make sales through one or more underwriters or agents in at-the-market offerings, we will do so pursuant to the terms of a sales agency financing agreement or other at-the-market offering arrangement between us, on one hand, and the underwriters or agents, on the other. If we engage in at-the-market sales pursuant to any such agreement, we will issue and sell our securities through one or more underwriters or agents, which may act on an agency basis or a principal basis. During the term of any such agreement, we may sell securities on a daily basis in exchange transactions or otherwise as we agree with the underwriters or agents. Any such agreement will provide that any securities sold will be sold at prices related to the then prevailing market prices for our securities. Therefore, exact figures regarding proceeds that will be raised or commissions to be paid cannot be determined as of the date of this prospectus. Pursuant to the terms of the agreement, we may agree to sell, and the relevant underwriters or agents may agree to solicit offers to purchase, blocks of our common shares or other securities. The terms of any such agreement will be set forth in more detail in the applicable prospectus or prospectus supplement.

Market Making, Stabilization, Other Transactions and Settlement

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may over-allot in connection with the offering, creating a short position for their own accounts. In addition, to cover over-allotments or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in one business day, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than two scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the second business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than two scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

Unless the applicable prospectus supplement states otherwise, each offered security will be a new issue and will have no established trading market, with the exception of our common shares. We may elect to list any offered securities on an exchange. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities offered pursuant to this prospectus.

Derivative Transactions and Hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sale transactions and other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may effect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others. The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities.

Electronic Auctions

We may also make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you should pay particular attention to the description of that system we will provide in a prospectus supplement.

Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called “real-time” basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder’s individual bids would be accepted, prorated or rejected.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

General Information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act. Our agents, underwriters, and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us, in the ordinary course of business.

MATERIAL INCOME TAX CONSIDERATIONS

The applicable prospectus supplement may describe material U.S. federal income tax consequences of the acquisition, ownership and disposition of any of the securities offered by such prospectus supplement by an investor who is subject to U.S. federal taxation.

The applicable prospectus supplement may also describe material Canadian federal income tax considerations generally applicable to investors described therein of purchasing, holding and disposing of securities offered by such prospectus supplement, including, in the case of an investor who is not a resident of Canada, Canadian non-resident withholding tax considerations.

You should read the tax discussion in any prospectus supplement with respect to a particular offering and consult your own tax advisors with respect to the specific tax consequences of the acquisition, ownership and disposition of the securities offered by such prospectus supplement, including the applicability and effect of state, local and non-U.S. or Canadian tax laws, as well as U.S. and Canadian federal tax laws.

LEGAL MATTERS

We are being represented by Ropes & Gray LLP, Boston, Massachusetts 02199.

Certain legal matters relating to the securities offered by this prospectus under Canadian laws will be passed upon for us by Blake, Cassels & Graydon LLP, Vancouver, British Columbia. Additional legal matters may be passed on for us, or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Xenon Pharmaceuticals Inc. as of December 31, 2023 and 2022, and for each of the years in the three-year period ended December 31, 2023, and management’s assessment on the effectiveness of internal control over financial reporting as of December 31, 2023, have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC’s website at <http://www.sec.gov>. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may also access these filings through our website at www.xenon-pharma.com.

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC as discussed above. The registration statement and the documents referred to below under “Incorporation by Reference” are also available on our Internet website, www.xenon-pharma.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

Forms of any documents establishing the terms of the offered securities are filed as exhibits to the registration statement of which this prospectus forms a part or under cover of a Current Report on Form 8-K and incorporated in this prospectus by reference. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should read the actual documents for a more complete description of the relevant matters.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference much of the information that we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents furnished pursuant to Items 2.02 or 7.01 of any Current Report on Form 8-K and, except as may be noted in any such Form 8-K, exhibits filed on such form that are related to such information), until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, filed with the SEC on February 29, 2024;
- the portions of our Definitive Proxy Statement on [Schedule 14A](#) (other than information furnished rather than filed) that are incorporated by reference into our Annual Report on Form 10-K, filed with the SEC on April 26, 2024;
- our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2024](#), and [June 30, 2024](#), filed with the SEC on May 9, 2024, and August 8, 2024, respectively;
- our Current Reports on Form 8-K filed with the SEC on [March 8, 2024](#), [April 19, 2024](#), and [June 5, 2024](#); and
- the description of our common shares contained in our Registration Statement on [Form 8-A](#) as filed with the SEC on October 10, 2014 pursuant to Section 12(b) of the Exchange Act, as supplemented by Exhibit 4.3 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on February 29, 2024, and any other amendments or reports filed for the purpose of updating such description.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus.

Requests for such documents should be directed to:

Xenon Pharmaceuticals Inc.
Attn: Investor Relations
3650 Gilmore Way
Burnaby, BC V5G 4W8
Canada
(604) 484-3353

You may also access the documents incorporated by reference in this prospectus through our website at www.xenon-pharma.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.



Xenon Pharmaceuticals Inc.

**Common Shares
Preferred Shares
Warrants
Units**

PROSPECTUS

August 9, 2024



Up to \$350,000,000

Common Shares

We previously entered into an at-the-market equity offering sales agreement, dated August 6, 2020, as amended on March 1, 2022, or the Sales Agreement, with Jefferies LLC, or Jefferies, and Stifel, Nicolaus & Company, Incorporated, or Stifel, collectively referred to as the sales agents and each individually as a sales agent. In accordance with the terms of the Sales Agreement, we may offer and sell our common shares, without par value, or the Shares, from time to time through Jefferies and Stifel, acting as sales agents. As of the date of this prospectus, we have sold \$30,291,249 in Shares under the Sales Agreement. Pursuant to this prospectus, we may offer and sell Shares with an aggregate offering price of up to \$350,000,000.

Sales of the Shares, if any, under this prospectus will be made by any method permitted that is deemed to be an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act of 1933, as amended, or the Securities Act. Each sales agent will use its commercially reasonable efforts to sell on our behalf all of the Shares requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between each sales agent and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Our common shares are listed on the Nasdaq Global Market under the symbol “XENE.” The last reported sale price of our common shares on the Nasdaq Global Market on August 8, 2024 was \$41.01 per share.

Each sales agent will be entitled to compensation at a commission rate of up to 3.0% of the gross sales price of the shares sold through such sales agent under the Sales Agreement. In connection with the sale of the Shares on our behalf, the sales agents will be deemed to be “underwriters” within the meaning of the Securities Act and the compensation of the sales agents will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to the sales agents with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act. See “Plan of Distribution” beginning on page S-13 regarding the compensation to be paid to the sales agents.

An investment in our common shares involves significant risks. You should carefully consider the [Risk Factors](#) beginning on page S-8 of this prospectus and “Item 1A – Risk Factors” of our most recent report on Form 10-K or Form 10-Q that is incorporated by reference in this prospectus, before investing in our common shares.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Jefferies

Stifel

The date of this prospectus is August 9, 2024.

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You should rely only on the information contained in or incorporated by reference into this prospectus and any free writing prospectuses prepared by us or on our behalf. We have not authorized any person to provide any information or make any statement that differs from what is contained in this prospectus and any free writing prospectuses prepared by us or on our behalf. If any person does make a statement that differs from what is in this prospectus or any free writing prospectuses, you should not rely on it. This prospectus is not an offer to sell, nor is it a solicitation of an offer to buy, these securities in any jurisdiction in which the offer or sale is not permitted. You should assume that the information contained in this prospectus, any free writing prospectus and the documents incorporated by reference is accurate only as of its respective date, regardless of the time of delivery of this prospectus, any free writing prospectus or of any sale of common shares in this offering. Our business, financial condition, results of operations and prospects may have subsequently changed.

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, as a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act.

This prospectus and the documents incorporated by reference herein include important information about us, our common shares and other information you should know before investing. This prospectus describes the specific details regarding this offering, including the price, the amount of common shares being offered and the risks of investing in our common shares.

You should carefully read this prospectus together with the additional information described under the headings “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.”

Unless the context requires otherwise, references in this prospectus to “Xenon,” “the Company,” “we,” “us” and “our” refer to Xenon Pharmaceuticals Inc. and its wholly-owned subsidiary. We use the Xenon logo and other marks as trademarks in the United States and other countries. This prospectus and the other documents incorporated by reference contain references to our trademarks as well as third-party trademarks. Solely for convenience, trademarks and trade names, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use of third-party trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

CAUTIONARY STATEMENT ABOUT FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein include forward-looking statements within the meaning of Section 27A of the Securities Act, Section 21E of the Exchange Act, and Canadian securities laws. All statements other than statements of historical facts contained in this prospectus and in the documents incorporated by reference herein, including statements regarding the future financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “should,” “plan,” “expect,” and similar expressions, as they relate to us, are intended to identify forward-looking statements. We have based these forward-looking statements largely on current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, without limitation, those described in “Risk Factors” in this prospectus and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and in our subsequent Quarterly Reports on Form 10-Q, including, among other things:

- our ability to identify additional products or product candidates either from our internal research efforts or through acquiring or in-licensing other product candidates or technologies;
- the initiation, timing, cost, progress and success of our research and development programs, pre-clinical studies, and clinical trials;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our ability to recruit sufficient numbers of patients for our current and future clinical trials;
- our ability to obtain funding for our operations in sufficient amounts or on terms acceptable to us, including funding necessary to complete further development, approval and, if approved, commercialization of our product candidates;
- our ability to independently develop and commercialize product candidates;
- developments relating to our competitors and our industry, including the success of competing therapies that are or become available;
- our pre-commercial, commercialization, marketing and manufacturing capabilities and strategy;
- our ability to obtain and maintain intellectual property protection for our product candidates and the duration of such protection;
- the therapeutic benefits, effectiveness and safety of our product candidates;
- the timing of, and our and our collaborators’ ability to obtain and maintain, regulatory approvals for our product candidates;
- the accuracy of our estimates of the size and characteristics of the markets that may be addressed by our products and product candidates and our ability to serve those markets, either alone or in partnership with others;
- the rate and degree of market acceptance and clinical utility of any future products;
- the pricing and reimbursement of our product candidates, if approved;
- our expectations regarding federal, state and foreign regulatory requirements;
- our ability to establish and maintain collaborations;
- our expectations regarding market risk, including interest rate changes and foreign currency fluctuations;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to engage and retain the employees required to grow our business;
- our use of proceeds of this offering;
- our future financial performance; and

- the direct and indirect impact of pandemics, epidemics and other public health crises on our business and operations, including supply chain, manufacturing, research and development costs, clinical trial conduct, clinical trial data and employees.

These risks are not exhaustive. Other sections of this prospectus and the documents incorporated by reference herein include additional factors which could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for us to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. These statements, like all statements in this prospectus, speak only as of their date, and we undertake no obligation to update or revise any forward-looking statements in light of future developments, except as required by law. Our Risk Factors are not guarantees that no such conditions exist as of the date of this prospectus and should not be interpreted as an affirmative statement that such risks or conditions have not materialized, in whole or in part.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere or incorporated by reference in this prospectus and may not contain all of the information that is important to you. This prospectus includes or incorporates by reference information about the common shares we are offering as well as information regarding our business, risks and detailed financial data. You should read this prospectus in its entirety, including the information incorporated by reference herein.

Xenon Pharmaceuticals Inc.

We are a neuroscience-focused biopharmaceutical company dedicated to discovering, developing, and commercializing innovative therapeutics to improve the lives of people living with neurological and psychiatric disorders. We are advancing a novel product pipeline to address areas of high unmet medical need, including epilepsy and depression.

Azetukalner Clinical Development

Azetukalner (XEN1101), our lead Kv7 channel opener, represents the most advanced, clinically validated potassium channel modulator in late-stage clinical development for multiple indications. Azetukalner is a novel, potent Kv7 potassium channel opener being developed for the treatment of epilepsy, including focal onset seizures, or FOS, and primary generalized tonic-clonic seizures, or PGTCs, as well as major depressive disorder, or MDD, with the Company exploring applicability in other neuropsychiatric disorders. Our Phase 3 epilepsy program includes three ongoing clinical trials, including X-TOLE2 and X-TOLE3 in FOS and X-ACKT in PGTCs.

- Phase 3 FOS studies continue to advance, with the first topline data readout from X-TOLE2 anticipated in the second half of 2025. The Phase 3 FOS clinical trials are multicenter, randomized, double-blind, placebo-controlled studies evaluating the clinical efficacy, safety, and tolerability of azetukalner in patients with FOS.
- Phase 3 X-ACKT clinical trial is currently enrolling patients and is intended to support potential regulatory submissions in an additional epilepsy indication of PGTCs. This multicenter, randomized, double-blind, placebo-controlled trial is evaluating the clinical efficacy, safety and tolerability of azetukalner in patients with PGTCs.
- X-TOLE Phase 2b open-label extension, or OLE, has been extended to seven years and continues to generate important long-term data for azetukalner beyond the 600 patient-years of exposure to date. Upon completion of the double-blind period in the Phase 3 epilepsy studies, eligible patients may enter an OLE study for up to three years.
- We presented Phase 2 X-NOVA data at the American Society of Clinical Psychopharmacology, or ASCP, meeting in May 2024. The X-NOVA study evaluated azetukalner in patients with MDD. The first of three planned Phase 3 clinical trials in MDD is expected to initiate in the second half of 2024.
- We continue to support the investigator-sponsored Phase 2 proof-of-concept study of azetukalner in MDD led by Icahn School of Medicine at Mount Sinai, with patient enrollment anticipated to complete this quarter.

Early-Stage Pipeline: Next Generation Ion Channel Modulators

As leaders in the small molecule ion channel space, we continue to leverage our extensive expertise to discover and develop potassium and sodium channel therapeutics. We are evaluating multiple therapeutic candidates targeting Kv7, Nav1.7, and Nav1.1 across various indications with the goal of filing multiple INDs, or equivalent, in 2025.

- We have nominated multiple Kv7 development candidates, with a lead candidate in IND-enabling studies. Kv7 may have utility in a broad range of therapeutic indications including seizures, pain, and neuropsychiatric disorders, such as MDD.
- A lead Nav1.7 candidate is expected to enter IND-enabling studies in the near term. Nav1.7 is an important pain-related target, based on strong human genetic validation, that may represent a new class of medicines without the limitations of opioids.
- We expect to nominate a lead Nav 1.1 candidate, as pre-clinical data suggests that targeting Nav1.1 could potentially address the underlying cause and symptoms of Dravet Syndrome.

Partnered Program

As part of our ongoing collaboration with Neurocrine Biosciences, Inc. to develop treatments for epilepsy, a Phase 2 clinical trial is evaluating NBI-921352 (formerly XEN901) in an orphan pediatric epilepsy (SCN8A-DEE), and the next lead candidate, a Nav1.2/1.6 inhibitor, is in IND-enabling studies with the intent to progress into human clinical trials in 2025 as a potential treatment for FOS.

Risk Factors Summary

This investment involves a high degree of risk. See “Risk Factors” beginning on page S-8 of this prospectus and the similarly titled sections in the documents incorporated by reference into this prospectus.

Corporate Information

We were incorporated in the Province of British Columbia on November 5, 1996 under the predecessor to the Business Corporations Act (British Columbia) under the name “Xenon Bioresearch Inc.” We continued from British Columbia to the federal jurisdiction pursuant to Section 187 of the Canada Business Corporations Act, or the CBCA, on May 17, 2000 and concurrently changed our name to “Xenon Genetics Inc.” We registered as an extra-provincial company in British Columbia on July 10, 2000 and changed our name to “Xenon Pharmaceuticals Inc.” on August 24, 2004. We have one wholly-owned subsidiary as of the date of this prospectus, Xenon Pharmaceuticals USA Inc., which was incorporated in Delaware on December 2, 2016. Our principal executive offices are located at 3650 Gilmore Way, Burnaby, British Columbia, Canada V5G 4W8, and our telephone number is (604) 484-3300. We are a reporting issuer in British Columbia, Alberta and Ontario, but our shares are not listed on any recognized Canadian stock exchange. Our common shares trade on the Nasdaq Global Market under the symbol “XENE.” Our website address is www.xenon-pharma.com. The information on, or that can be accessed through, our website is not incorporated by reference into this prospectus and should not be considered to be a part of this prospectus.

THE OFFERING

Common shares offered by us	Common shares having an aggregate offering price of up to \$350,000,000.
Common shares to be outstanding after this offering	Up to 8,534,503 common shares, assuming a sales price of \$41.01 per share, which was the last reported sale price of our common shares on the Nasdaq Global Market on August 8, 2024. The actual number of shares issued will vary depending on the sales price under this offering.
Plan of Distribution	“At the market offering” that may be made from time to time on the Nasdaq Global Market, if at all, through the sales agents. See “Plan of Distribution” on page S-13 of this prospectus.
Use of Proceeds	We intend to use the net proceeds from the sale of Shares offered by this prospectus, together with other available funds, to progress our clinical development programs, initiate pre-commercial activities, fund our discovery and pre-clinical activities and for other general corporate purposes. See “Use of Proceeds” on page S-9 of this prospectus.
Risk Factors	This investment involves a high degree of risk. See “Risk Factors” beginning on page S-8 of this prospectus and the similarly titled sections in the documents incorporated by reference into this prospectus.
Nasdaq Global Market symbol	Our common shares are listed on Nasdaq under the symbol “XENE.”

The number of common shares that will be outstanding after this offering as shown above is based on 75,667,550 common shares outstanding as of June 30, 2024, which number excludes:

- 10,783,798 common shares issuable upon the exercise of stock options to purchase common shares as of June 30, 2024, at a weighted average exercise price of \$28.35 per common share;
- 195,000 common shares issuable upon the vesting of outstanding performance share units as of June 30, 2024;
- 6,264,005 common shares reserved for future issuance under our Amended and Restated 2014 Equity Incentive Plan as of June 30, 2024;
- 40,000 common shares issuable upon the exercise of a warrant outstanding as of June 30, 2024, at a weighted-average exercise price of \$9.79 per common share; and
- pre-funded warrants to purchase 2,173,081 common shares outstanding as of June 30, 2024, at an exercise price of \$0.0001 per share.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before purchasing our securities, you should carefully consider the risk factors relating to Xenon Pharmaceuticals Inc. set forth below along with those that are incorporated by reference in this prospectus from our Annual Report on Form 10-K for the year ended December 31, 2023 and subsequent Quarterly Reports on Form 10-Q, as well as the risks, uncertainties and additional information set forth in our SEC reports on Forms 10-K, 10-Q and 8-K and in the other documents incorporated by reference in this prospectus. For a description of these reports and documents, and information about where you can find them, see “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.” Additional risks not presently known or that we presently consider to be immaterial could subsequently materially and adversely affect our financial condition, results of operations, business and prospects.

Risks Related to this Offering

If you purchase common shares sold in this offering, you will experience immediate and substantial dilution in the net tangible book value of your common shares.

The price per common share being offered may be higher than the net tangible book value per share of our outstanding common shares prior to this offering. Assuming that an aggregate of 8,534,503 of our common shares are sold at an assumed offering price of \$41.01 per common share, the last reported sale price of our common shares on the Nasdaq Global Market on August 8, 2024, for aggregate gross proceeds of approximately \$350.0 million, and after deducting commissions and estimated offering expenses payable by us, new investors in this offering will incur immediate dilution of \$26.94 per common share. For a more detailed discussion of the foregoing, see the section entitled “Dilution” below.

We will have broad discretion over the use of the net proceeds from this offering.

We will have broad discretion to use the net proceeds from the sale of Shares in this offering, and investors in our common shares will be relying on the judgment of our board of directors and management regarding the application of these proceeds. Although we intend to use the net proceeds from this offering to progress our clinical development programs and for other general corporate purposes, we have not allocated these net proceeds for specific purposes. Investors will not have the opportunity, as part of their investment decision, to assess whether the proceeds are being used appropriately. Our use of the proceeds may not improve our operating results or increase the value of the securities being offered hereby.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of Shares offered by this prospectus, together with other available funds, to progress our clinical development programs, initiate pre-commercial activities, fund our discovery and pre-clinical activities and for other general corporate purposes. The amount of net proceeds from this offering will depend upon the number of Shares sold and the market prices at which they are sold. There can be no assurance that we will be able to sell any Shares under or fully utilize the Sales Agreement as a source of financing.

We have not specifically identified the precise amounts we will spend on particular areas or the timing of these expenditures. The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including the amount and timing of the proceeds from the sale of Shares offered by this prospectus, the progress of our clinical trials, pre-commercialization efforts and other product development activities. In addition, expenditures may also depend on the establishment of new collaborative arrangements with other partners, the availability of other financing and other factors. Pending these uses, we plan to invest these net proceeds in treasury bills, corporate bonds, commercial paper, term deposits, bankers acceptances or deposit-based investments including, but not limited to, interest savings accounts. The goal with respect to the investment of these net proceeds is capital preservation and liquidity so that such funds are readily available to fund our operations.

We anticipate that we will be required to raise substantial additional capital to continue to fund the clinical development of our product candidates. If we are able to gain marketing approval for product candidates that we develop, we will require significant additional amounts of capital in order to launch and commercialize such product candidates to the extent that such launch and commercialization are not the responsibility of a collaborator. We expect to finance our future cash needs through public or private equity offerings, debt financings, royalty-based financing, collaborations, licensing arrangements or other sources, or any combination of the foregoing.

DILUTION

If you invest in our common shares, your interest will be diluted immediately to the extent of the difference between the public offering price per common share you will pay in this offering and the as adjusted net tangible book value per common share after this offering. Net tangible book value per common share represents our total tangible assets less total liabilities, divided by the number of common shares outstanding.

As of June 30, 2024, our net tangible book value was \$844.0 million, or \$11.15 per common share. After giving effect to the sale of our common shares in the aggregate amount of \$350.0 million at an assumed offering price of \$41.01 per common share, the last reported sale price of our common shares on August 8, 2024 on the Nasdaq Global Market, and after deducting estimated commissions and estimated offering expenses, our as adjusted net tangible book value as of June 30, 2024 would have been approximately \$1,185.1 million or approximately \$14.07 per common share. This represents an immediate increase in the net tangible book value of \$2.92 per common share to existing shareholders and an immediate dilution of \$26.94 per common share to new investors purchasing common shares in this offering.

The following table illustrates this per common share dilution to the new investors purchasing common shares in this offering:

Assumed public offering price per common share		\$41.01
Net tangible book value per common share at June 30, 2024	\$11.15	
Increase in net tangible book value per common share attributable to this offering	\$ 2.92	
As adjusted net tangible book value per common share after this offering		\$14.07
Dilution per common share to new investors in this offering		\$26.94

The table above assumes for illustrative purposes an aggregate of 8,534,503 of our common shares are sold at a price of \$41.01 per common share, for aggregate gross proceeds of \$350.0 million. The common shares, if any, sold in this offering will be sold from time to time at various prices. An increase of \$1.00 per common share in the price at which the common shares are sold from the assumed offering price of \$41.01 per common share shown in the table above, assuming all of our common shares in the aggregate amount of \$350.0 million are sold at that price, would increase our adjusted net tangible book value per common share after the offering to \$14.11 per common share and would increase the dilution in net tangible book value per common share to new investors in this offering to \$27.90 per common share, after deducting estimated commissions and estimated offering expenses. A decrease of \$1.00 per common share in the price at which the common shares are sold from the assumed offering price of \$41.01 per common share shown in the table above, assuming all of our common shares in the aggregate amount of \$350.0 million are sold at that price, would decrease our adjusted net tangible book value per common share after the offering to \$14.04 per common share and would decrease the dilution in net tangible book value per common share to new investors in this offering to \$25.97 per common share, after deducting estimated commissions and estimated offering expenses. This information is supplied for illustrative purposes only.

The foregoing table and calculations are based on 75,667,550 common shares outstanding as of June 30, 2024, which number excludes:

- 10,783,798 common shares issuable upon the exercise of stock options to purchase common shares as of June 30, 2024, at a weighted average exercise price of \$28.35 per common share;
- 195,000 common shares issuable upon the vesting of outstanding performance share units as of June 30, 2024;
- 6,264,005 common shares reserved for future issuance under our Amended and Restated 2014 Equity Incentive Plan as of June 30, 2024;
- 40,000 common shares issuable upon the exercise of a warrant outstanding as of June 30, 2024, at a weighted-average exercise price of \$9.79 per common share; and
- pre-funded warrants to purchase 2,173,081 common shares outstanding as of June 30, 2024, at an exercise price of \$0.0001 per share.

To the extent the stock options or warrants outstanding as of June 30, 2024 have been or are exercised, or other common shares are issued, investors purchasing common shares in this offering could experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common shares or any other securities. We currently anticipate that we will retain all available funds and any future earnings, if any, in the foreseeable future for use in the operation of our business and do not currently anticipate paying cash dividends in the foreseeable future. Payment of future cash dividends, if any, will be at the discretion of the board of directors, subject to applicable law and will depend on various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

PLAN OF DISTRIBUTION

We previously entered into the Sales Agreement on August 6, 2020, as amended on March 1, 2022, under which we may issue and sell our Shares from time to time through Jefferies and Stifel, acting as our sales agents. As of the date of this prospectus, we have sold \$30,291,249 in Shares under the Sales Agreement. Pursuant to this prospectus, we may offer and sell up to \$350,000,000 of Shares. Sales of our Shares, if any, under this prospectus will be made by any method that is deemed to be an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act, including sales made directly on or through the Nasdaq Global Market or any other existing trading market for the common shares in the United States. This summary of the material provisions of the Sales Agreement does not purport to be a complete statement of its terms and conditions. A copy of the Sales Agreement is filed as Exhibit 1.2 to the registration statement of which this prospectus is a part and is incorporated herein by reference.

Each sales agent will offer the Shares subject to the terms and conditions of the Sales Agreement on any trading day or as otherwise agreed upon by us and such sales agent. We will designate the maximum amount and minimum price of Shares to be sold through a sales agent on a daily basis or otherwise determine such amounts together with the sales agents. Subject to the terms and conditions of the Sales Agreement, each sales agent will use its commercially reasonable efforts to sell on our behalf the Shares. We may instruct the sales agents not to sell Shares if the sales cannot be effected at or above the price designated by us in any such instruction. We may only instruct one sales agent to sell common shares on any single given day. We or the sales agents may suspend the offering of Shares being made under the Sales Agreement upon proper notice. Each sales agent will receive from us a commission of up to 3.0% of the gross sales price per Share for any Shares sold through it under the Sales Agreement. The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such Shares.

Each sales agent will provide written confirmation to us following the close of trading on the Nasdaq Global Market each day in which Shares are sold by such sales agent for us under the Sales Agreement. Each confirmation will include the number of Shares sold on that day, the gross sales price per Share, the net proceeds to us, and the compensation payable by us to the sales agent.

Settlement for sales of Shares will occur, unless we and the applicable sales agent agree otherwise, on the first business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

In connection with the sale of the Shares on our behalf, the sales agents will be deemed to be “underwriters” within the meaning of the Securities Act, and the compensation paid to the sales agents will be deemed to be underwriting commissions or discounts. We have agreed in the Sales Agreement to provide indemnification and contribution to the sales agents against certain civil liabilities, including liabilities under the Securities Act.

We estimate that the total expenses of the offering payable by us, excluding discounts and commissions payable to the sales agents under the Sales Agreement, will be approximately \$200,000.

The offering of Shares pursuant to the Sales Agreement will terminate upon the earlier of (1) the sale of all of the Shares subject to the Sales Agreement and (2) the termination of the Sales Agreement by the sales agents or us, as permitted therein.

The sales agents and their affiliates may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they may in the future receive customary fees. In the course of their business, the sales agents may actively trade our securities for their own account or for the accounts of customers, and, accordingly, the sales agents may at any time hold long or short positions in such securities.

MATERIAL INCOME TAX CONSIDERATIONS

U.S. Federal Income Tax Information for U.S. Holders

The following summary describes the material U.S. federal income tax consequences of the ownership and disposition of common shares, to the extent set forth below, purchased in this offering. The discussion set forth below is applicable to U.S. Holders (as defined below). This summary deals only with common shares held as capital assets, meaning generally, assets held for investment.

The term “U.S. Holder” means a beneficial owner of a common share that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the U.S. (for U.S. federal income tax purposes);
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the U.S., any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if it (a) is subject to the primary supervision of a court within the U.S. and one or more U.S. persons have the authority to control all substantial decisions of the trust or (b) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

This summary does not describe all of the U.S. federal income tax consequences applicable to a U.S. Holder if such U.S. Holder is subject to special treatment under U.S. federal income tax laws, including if such U.S. Holder is:

- a dealer or broker in securities or currencies;
- a financial institution;
- a regulated investment company;
- a real estate investment trust;
- an insurance company;
- a tax-exempt organization;
- a person holding our common shares as part of a hedging, integrated or conversion transaction, a constructive sale or a straddle;
- a trader in securities that has elected the mark-to-market method of accounting for its securities;
- a person who owns, directly, indirectly or constructively, or is deemed to own 10% or more of our equity, by vote or value;
- a partnership or other pass-through entity for U.S. federal income tax purposes;
- a person whose “functional currency” is not the U.S. dollar;
- a person that received common shares as compensation for the performance of services;
- a person holding our common shares in connection with a trade or business conducted outside the United States; or
- a former citizen or long-term resident of the U.S.

If a partnership (or any other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common shares, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Partners of a partnership holding our common shares should consult their own tax advisors.

The discussion below is based upon the provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, and Treasury Regulations, including proposed Treasury Regulations, Internal Revenue Service, or the IRS, rulings and judicial decisions thereunder as of the date of this prospectus. These authorities may be replaced, revoked or modified so as to result in U.S. federal income tax consequences different from those discussed below. This discussion does not contain a detailed description of all U.S. federal income tax consequences applicable to a U.S. Holder in light of such U.S. Holder's particular circumstances, including U.S. federal estate, gift and alternative minimum tax consequences, the special tax accounting rules under Section 451(b) of the Code, or any state, local or non-U.S. tax consequences.

If you are considering the purchase of our common shares, you should consult your own tax advisors concerning the U.S. federal income tax consequences to you in light of your particular situation as well as any consequences arising under the laws of any other taxing jurisdiction.

Taxation of Dividends

Subject to the discussion below under "Passive Foreign Investment Company Consequences," the gross amount of distributions on our common shares (including amounts withheld to pay Canadian withholding taxes) will be taxable as dividends to a U.S. Holder to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Dividends paid on our common shares (including withheld taxes) will be includable in a U.S. Holder's gross income as dividend income when actually or constructively received. Such dividends will not be eligible for the dividends-received deduction generally allowed to corporations with respect to dividends received from U.S. corporations. Distributions treated as dividends that are received by non-corporate U.S. Holders may qualify for reduced tax rates applicable to long-term capital gains on dividends received from a "qualified foreign corporation" provided certain holding period and other requirements are met. A non-U.S. corporation generally will be considered to be a qualified foreign corporation if (i) it is eligible for the benefits of a comprehensive tax treaty with the United States, which the Secretary of the Treasury of the United States determines is satisfactory for purposes of this provision, and which includes an exchange of information provision; or (ii) its shares are readily tradeable on an established securities market in the United States. However, if we are a passive foreign investment company, or PFIC, for the taxable year in which the dividends are paid or the preceding taxable year (see "Passive Foreign Investment Company Consequences" below).

Subject to certain conditions and limitations, Canadian tax withheld from dividends paid on our common shares may be deducted by a U.S. Holder from adjusted gross income or claimed as a credit against the U.S. Holder's U.S. federal income tax liability. A U.S. Holder may claim a deduction for Canadian taxes withheld from dividends paid in a taxable year only if the U.S. Holder elects to deduct all foreign income taxes paid in that taxable year. The rules relating to the availability of foreign tax credits and the foreign source income classification relevant to the use of the foreign tax credits are complex. These depend on a number of factors, including but not limited to whether we are a "United States owned foreign corporation," whether such income is in the "passive category," claims required by and special elections available to qualified treaty residents, and special rules related to foreign tax credits with respect to dividends from a PFIC. In the event we pay a dividend, each US Holder should consult with its own tax advisor to determine its tax filing position with respect to foreign tax credits that may be available with respect to withholding tax imposed by Canada.

To the extent that the amount of any distribution or deemed distribution exceeds our current and accumulated earnings and profits, as determined under U.S. federal income tax principles, the distribution will first be treated as a tax-free return of capital, causing a reduction (but not below zero) in the adjusted basis of the common shares (thereby increasing the amount of gain, or decreasing the amount of loss, to be recognized on a subsequent disposition of the common shares), and the balance in excess of adjusted basis will be taxed as capital gain recognized on a sale or exchange. However, we cannot provide any assurance that we will maintain or provide earnings and profits determinations in accordance with U.S. federal income tax principles. Therefore, U.S. Holders should expect that a distribution will generally be treated as a dividend (as discussed above) even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain under the rules described above.

If a distribution is paid in Canadian dollars, the U.S. dollar value of such distribution on the date of receipt is used to determine the amount of the distribution received by a U.S. Holder. A U.S. Holder who continues to hold such Canadian dollars after the date on which they are received may recognize gain or loss upon their disposition due to exchange rate fluctuations. Generally, such gains and losses will be ordinary income or loss from U.S. sources.

Taxation of Sales or Other Dispositions

Subject to the discussion below under "Passive Foreign Investment Company Consequences," a U.S. Holder will recognize taxable gain or loss on the sale or other taxable disposition of our common shares equal to the difference between the amount realized for the common shares and the U.S. Holder's adjusted tax basis in the common shares and such gain or loss will be capital gain or loss. Capital gains of non-corporate U.S. Holders, including individual U.S. Holders, derived with respect to capital assets held for more than one year are, under current law, eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations. Any gain or loss recognized by a U.S. Holder will generally be U.S. source gain or loss for foreign tax credit limitation purposes.

Passive Foreign Investment Company Consequences

In general, a corporation organized outside the U.S. will be treated as a PFIC in any taxable year, after applying certain look-through rules with respect to the income and assets of its subsidiaries, in which either (i) at least 75% of its gross income is “passive income” or (ii) at least 50% of the quarterly average percentage of its assets (as determined under applicable Treasury Regulations) is attributable to assets that produce passive income or are held for the production of passive income. Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from commodities and currency transactions and from the sale or exchange of property that gives rise to passive income. Assets that produce or are held for the production of passive income include cash, even if held as working capital or raised in a public offering, marketable securities and other assets that may produce passive income. In the case of a publicly traded corporation, the average percentage of a corporation’s assets that produce or are held for the production of passive income generally is determined on the basis of the fair market value of the corporation’s assets at the end of each quarter (which may be determined in part by the market value of our common shares, which is subject to change). In determining whether a foreign corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account. Based on our gross income and gross assets, we were a PFIC for the taxable year ended December 31, 2023, and we may be a PFIC in 2024.

However, our status as a PFIC is a fact-intensive determination made on an annual basis and the applicable law is subject to varying interpretation. In addition, our PFIC status determination can be made only after the end of each taxable year. Accordingly, we cannot provide any assurance regarding our PFIC status for the current taxable year or for future taxable years. Neither our U.S. counsel nor U.S. tax advisor expresses any opinion with respect to our PFIC status or with respect to our expectations regarding our PFIC status.

If we are a PFIC in any taxable year during which a U.S. Holder owns our common shares, such U.S. Holder would be subject to taxation under the rules related to “excess distributions.” Under such rules, additional taxes and interest charges would apply to certain distributions (including deemed distributions) by us or to gain upon dispositions of our common shares if a U.S. Holder has not elected to have his or her investment in our common shares treated as an investment in a “qualified electing fund” or has not made a “mark-to-market election.” If we are a PFIC, all of the gains recognized on disposition of our common shares would be treated as an excess distribution. In the case of an actual distribution, such distribution from us would be treated as an excess distribution only to the extent the total of the actual distributions (or such constructive distributions) during a taxable year received by the U.S. Holder exceeds 125% of the average of such distributions received in the three preceding taxable years, or, if shorter, the U.S. Holder’s holding period for our common shares. In these circumstances, the tax and interest charges will be determined by allocating such distributions ratably over the U.S. Holder’s holding period for the common shares. The amount allocated to the current taxable year (i.e. the year in which the gain is recognized or the distribution occurs) and any year prior to the first taxable year in which we are a PFIC would be taxed as ordinary income earned in the current taxable year, and the amount allocated to each of the other years in the holding period would be subject to a special tax and interest charge.

The amount allocated to other taxable years (or portions thereof) of the U.S. Holder will be taxed at the highest marginal rates in effect for individuals or corporations as applicable to such U.S. Holder and applicable to ordinary income for each such taxable year, and an interest charge, generally applicable to underpayments of tax, will be added to the tax. If we are a PFIC at any time when a U.S. Holder holds our common shares, we will generally continue to be treated as a PFIC with respect to the U.S. Holder for all succeeding years during which the U.S. Holder holds our common shares even if we cease to meet the PFIC gross income test or asset test. However, if we cease to meet these tests, a U.S. Holder can avoid the continuing impact of the PFIC rules by making a special election, a “Purging Election”, to recognize gain in the manner described above as if our common shares had been sold on the last day of the last taxable year during which we were a PFIC. In addition, for a U.S. Holder making such an election, a new holding period would be deemed to begin for our common shares for purposes of the PFIC rules. After the Purging Election, the common shares with respect to which the Purging Election was made will not be treated as shares in a PFIC unless we subsequently become a PFIC.

The tax consequences that would apply if we were a PFIC would be different from those described above if a U.S. Holder were able to make a valid “qualified electing fund,” or QEF, election. For each year that we meet the PFIC gross income test or asset test, an electing U.S. Holder would be required to include in gross income its pro rata share of our net ordinary income and net capital gains, if any, as determined under U.S. federal income tax principles. The U.S. Holder’s adjusted tax basis in our common shares would be increased by the amount of such inclusions. An actual distribution to the U.S. Holder out of such income generally would not be treated as a dividend and would decrease the U.S. Holder’s adjusted tax basis in our common shares. Gain realized from the sale of our common shares covered by a QEF election would be taxed as a capital gain.

Generally, a QEF election must be made by the U.S. Holder in a timely filed tax return for the first taxable year in which the U.S. Holder held our common shares that includes the close of our taxable year for which we met the PFIC gross income test or asset test. A QEF election is made on IRS Form 8621 so which a PFIC Annual Information Statement is attached. U.S. Holders will be eligible to make QEF elections only if we provide U.S. Holders with the information they will need to comply with the QEF rules. If we believe we are a PFIC in the current or a future tax year, we will provide, upon request, U.S. Holders with the information that is necessary in order for them to make a QEF election and to report their pro rata shares of ordinary earnings and net capital gains for each year for which we are a PFIC.

The tax consequences that would apply if we were a PFIC would also be different from those described above if a timely and valid “mark-to-market” election is made by a U.S. Holder of our common shares. An electing U.S. Holder generally would take into account as ordinary income for each year that we meet the PFIC gross income test or asset test the excess of the fair market value of our common shares held at the end of the taxable year over the adjusted tax basis of such common shares. The U.S. Holder would also take into account, as an ordinary loss for each year that we meet the PFIC gross income test or asset test, the excess of the adjusted tax basis of such common shares over their fair market value at the end of the taxable year, but only to the extent of the aggregate of the amounts previously included in income as a result of the mark-to-market election. The U.S. Holder’s tax basis in our common shares would be adjusted to reflect any income or loss resulting from the mark-to-market election. Any gain from a sale, exchange or other disposition of the common shares in any taxable year in which we are a PFIC would be treated as ordinary income and any loss from such sale, exchange or other disposition would be treated first as ordinary loss to the extent of any net mark-to-market gains previously included in income and thereafter as capital loss. If, after having been a PFIC for one or more taxable years, we cease to be classified as a PFIC, the U.S. Holder would not be required to take into account any latent gain or loss in the manner described above and any realized gain or loss would be classified as a capital gain or loss. A mark-to-market election will not apply to our common shares for any taxable year during which we are not a PFIC, but it will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any subsidiary that we own.

A mark-to-market election is available to a U.S. Holder only if the common shares are considered “marketable stock.” Generally, stock will be considered marketable stock if it is “regularly traded” on a “qualified exchange” within the meaning of applicable Treasury Regulations. A class of stock is regularly traded during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. We expect that our common shares will be marketable stock as long as they remain listed on Nasdaq and are regularly traded.

If we are a PFIC in any taxable year during which a U.S. Holder owns the common shares, such U.S. Holder may also suffer adverse tax consequences under the PFIC rules described above with respect to any lower-tier PFIC in which we have a direct or indirect equity interest.

Each U.S. Holder who is a shareholder of a PFIC must file an annual report containing certain information as the U.S. Treasury Department may require.

U.S. Holders should consult their own tax advisors with respect to their particular circumstances, making any of the elections described above and any related reporting requirements if we are a PFIC in any taxable year.

Net Investment Income Tax

Certain U.S. Holders who are individuals, estates or trusts may be subject to a 3.8% U.S. federal income tax on all or a portion of their “net investment income,” which includes all or a portion of their dividends (or deemed dividends) on our common shares and net gains from the disposition of our common shares. U.S. Holders that are individuals, estates or trusts should consult their tax advisors regarding the applicability of the U.S. federal income tax on net investment income to any of their income or gains in respect of our common shares.

Information Reporting and Backup Withholding

In general, information reporting will apply to dividends (or deemed dividends) in respect of our common shares and the proceeds from the sale or disposition of our common shares that are paid to a U.S. Holder within the U.S. (and in certain cases, outside the U.S.), unless the U.S. Holder is an exempt recipient and properly certifies their exemption. Backup withholding may apply to such payments if the U.S. Holder fails to provide a taxpayer identification number or certification of other exempt status or if the U.S. Holder has previously failed to report in full dividend or interest income. If backup withholding applies to a payment, we or our paying agent will deduct the amount of any required withholding directly from such payment and remit it directly to the U.S. Treasury on behalf of the U.S. Holder. Backup withholding is not an additional tax. Any amounts withheld by us or our paying agent under the backup withholding rules may be allowed as a refund or a credit against the U.S. Holder's U.S. federal income tax liability provided the required information is timely furnished to the IRS.

U.S. Holders are urged to consult with their tax advisors regarding the applicable U.S. disclosure and information reporting requirements. In certain circumstances, the failure to comply with disclosure and information reporting requirements will result in an extension of the statute of limitations on the assessment and collection of U.S. federal income taxes applicable to the U.S. Holder.

Disclosure Requirements for Specified Foreign Financial Assets

Certain U.S. Holders (and to the extent provided in IRS guidance, certain non-U.S. Holders) who hold interests in "specified foreign financial assets" (as defined in Section 6038D of the Code) are generally required to file an IRS Form 8938 as part of their U.S. federal income tax returns with information relating to such assets for each taxable year in which the aggregate value of all such assets exceeds \$75,000 at any time during the taxable year or \$50,000 on the last day of the taxable year (or such higher dollar amount as prescribed by applicable IRS guidance). "Specified foreign financial assets" generally include, among other assets, financial accounts maintained by foreign financial institutions, and our common shares, unless the common shares are held through an account maintained with a financial institution. Substantial penalties may apply to any failure to timely file IRS Form 8938. Additionally, in the event an applicable U.S. Holder (and to the extent provided in IRS guidance, a non-U.S. Holder) that is required to file IRS Form 8938 does not file such form, the statute of limitations on the assessment and collection of U.S. federal income taxes of such holder for the related tax year may not close until three years after the date that the required information is filed. Prospective investors are encouraged to consult with their own tax advisors regarding the possible reporting obligations under these disclosure requirements.

Principal Canadian Federal Income Tax Considerations

The following summary describes, as of the date hereof, the principal Canadian federal income tax consequences under the Income Tax Act (Canada) and the regulations promulgated thereunder (the "Canadian Tax Act") generally applicable to a holder (a "Holder") who acquires our common shares pursuant to this offering as beneficial owner and who, for the purposes of the Canadian Tax Act, and at all relevant times: (a) is not (and is not deemed to be) resident in Canada; (b) will not use or hold (and will not be deemed to use or hold) the common shares in, or in the course of, carrying on a business in Canada, or otherwise in connection with a business carried on in Canada; (c) holds the common shares as capital property; and (d) deals at arm's length with, and is not affiliated with (each within the meaning of the Canadian Tax Act), us or the sales agents. Generally, the common shares will be considered to be capital property to the Holder thereof provided that the Holder does not use or hold (and will not use or hold) such securities in the course of carrying on a business of trading or dealing in securities and such Holder has not acquired (and will not acquire) such securities in one or more transactions considered to be an adventure or concern in the nature of trade.

This summary is not applicable to: (a) a Holder that carries on or is deemed to carry on, an insurance business in Canada and elsewhere; or (b) a Holder that is "authorized foreign bank" (as defined in the Canadian Tax Act). Any such Holder to which this summary does not apply should consult its own tax advisor with respect to an investment in the common shares.

This summary is based upon the facts set out in this prospectus, the current provisions of the Canadian Tax Act and counsel's understanding of the published administrative and assessing policies and practices of the Canada Revenue Agency (the "CRA") published in writing by the CRA prior to the date hereof and all specific proposals to amend the Canadian Tax Act that have been publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "Canadian Tax Proposals"). This summary assumes that the Canadian Tax Proposals will be enacted substantially as proposed; however, no assurance can be given that the Canadian Tax Proposals will be enacted as proposed or at all. This summary does not otherwise take into account or anticipate any changes in law, or the CRA's administrative policies or assessing practices, whether by way of legislative, governmental or judicial decision or action, nor does it take into account other federal or any provincial, territorial or foreign tax legislation or considerations, which may differ significantly from those discussed herein.

This summary is not exhaustive of all possible Canadian federal income tax considerations of acquiring, holding or disposing of common shares. The summary is of a general nature only and is not intended to be, and should not be construed to be, legal, business, or tax advice to any prospective Holder and no representations with respect to the tax consequences to any prospective Holder are made. The tax consequences of acquiring, holding, and disposing of the common shares will vary according to the Holder's particular circumstances. Prospective Holders should consult their own tax advisors as to the Canadian federal tax consequences, and the tax consequences of any other jurisdiction, applicable to them having regard to their own particular circumstances.

Currency Conversion

All amounts in a currency other than the Canadian dollar relating to the acquisition, holding and disposition of the common shares must be converted into Canadian dollars based on the exchange rates determined in accordance with the Canadian Tax Act.

Dividends on the Common Shares

Dividends paid or credited or deemed to be paid or credited to a Holder by us on any common shares will be subject to Canadian withholding tax at the rate of 25% on the gross amount of the dividend unless such rate is reduced by the terms of an applicable income tax treaty or convention. In general, in the case of a Holder who is a resident of the United States for purposes of the Canada-United States Tax Convention (1980), as amended (the "Convention") who is paid or credited a dividend or deemed dividend, is the beneficial owner of such dividend or deemed dividend and who qualifies for full benefits under the Convention (a "U.S. Holder"), the rate of such Canadian withholding tax will generally be reduced to 15% of the gross amount of the dividend (or 5% in the case of a U.S. Holder that is a company beneficially owning at least 10% of our voting shares). The Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting, of which Canada is a signatory, affects many of Canada's tax treaties (but not the Convention), including the ability to claim benefits thereunder. Holders should consult their own tax advisors to determine their entitlement to relief under an applicable income tax treaty or convention.

Dispositions of the Common Shares

A Holder will not be subject to tax under the Canadian Tax Act in respect of any capital gain realized by such Holder on a disposition, or deemed disposition, of the common shares unless the common shares constitute "taxable Canadian property," as defined in the Canadian Tax Act, of the Holder at the time of disposition and the Holder is not entitled to an exemption under the applicable income tax treaty or convention. As long as the common shares are listed on a "designated stock exchange" as defined in the Canadian Tax Act (which currently includes the Nasdaq) at the time of disposition or deemed disposition, the common shares generally will not constitute taxable Canadian property of a Holder, unless (a) at any time during the 60-month period immediately preceding the disposition: (i) one or any combination of (A) the Holder, (B) persons not dealing at arm's length (within the meaning of the Canadian Tax Act) with such Holder, and (C) partnerships in which the Holder or a person described in (B) holds a membership interest directly or indirectly through one or more partnerships, owned 25% or more of our issued shares of any class or series; and (ii) more than 50% of the fair market value of the common shares was derived, directly or indirectly, from one or a combination of real or immovable property situated in Canada, "Canadian resource properties," as such term is defined in the Canadian Tax Act, "timber resource properties," as such term is defined in the Canadian Tax Act, or options in respect of, interests in, or, for civil law, rights in any such properties whether or not the property exists, or (b) the common shares are otherwise deemed to be taxable Canadian property of the Holder. If the common shares are considered taxable Canadian property to a Holder, an applicable income tax treaty or convention may in certain circumstances exempt that Holder from tax under the Canadian Tax Act in respect of the disposition or deemed disposition of the common shares. **Holders whose common shares are, or may be "taxable Canadian property" should consult their own tax advisors regarding the tax and compliance considerations that may be relevant to them.**

LEGAL MATTERS

We are being represented by Ropes & Gray LLP, Boston, Massachusetts. The validity of the Shares being offered by this prospectus and legal matters relating to Canadian laws will be passed upon for us by Blake, Cassels & Graydon LLP, Vancouver, British Columbia. Jefferies LLC and Stifel, Nicolaus & Company, Incorporated are being represented in connection with this offering by Cooley LLP, New York, New York.

EXPERTS

The consolidated financial statements of Xenon Pharmaceuticals Inc. as of December 31, 2023 and 2022, and for each of the years in the three-year period ended December 31, 2023, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2023 have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the internet at the SEC's website at www.sec.gov. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may also access these filings through our website at www.xenon-pharma.com.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we have filed with the SEC. The information we incorporate by reference into this prospectus is an important part of this prospectus. Any statement in a document we incorporate by reference into this prospectus will be considered to be modified or superseded to the extent a statement contained in this prospectus or any other subsequently filed document that is incorporated by reference into this prospectus modifies or supersedes that statement. The modified or superseded statement will not be considered to be a part of this prospectus, except as modified or superseded.

We incorporate by reference into this prospectus the information contained in the documents listed below, which is considered to be a part of this prospectus:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, filed with the SEC on February 29, 2024;
- the portions of our Definitive Proxy Statement on [Schedule 14A](#) (other than information furnished rather than filed) that are incorporated by reference into our Annual Report on Form 10-K, filed with the SEC on April 26, 2024;
- our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2024](#), and [June 30, 2024](#), filed with the SEC on May 9, 2024, and August 8, 2024, respectively;
- our Current Reports on Form 8-K filed with the SEC on [March 8, 2024](#), [April 19, 2024](#), and [June 5, 2024](#); and
- the description of our common shares contained in our Registration Statement on [Form 8-A](#) as filed with the SEC on October 10, 2014 pursuant to Section 12(b) of the Exchange Act, as supplemented by Exhibit 4.3 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on February 29, 2024, and any other amendments or reports filed for the purpose of updating such description.

We also incorporate by reference all documents filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering; provided, however, that we are not incorporating any information furnished under Item 2.02 or Item 7.01 of any Current Report on Form 8-K that we may subsequently file.

Statements made in this prospectus or the accompanying prospectus or in any document incorporated by reference in this prospectus as to the contents of any contract or other document referred to herein or therein are not necessarily complete, and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the documents incorporated by reference, each such statement being qualified in all material respects by such reference.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Xenon Pharmaceuticals Inc.
Attn: Investor Relations
3650 Gilmore Way
Burnaby, BC V5G 4W8
Canada
(604) 484-3300

You may also access the documents incorporated by reference in this prospectus through our website at www.xenon-pharma.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.



Up to \$350,000,000

Common Shares

PROSPECTUS

Jefferies

Stifel

August 9, 2024

PART II
Information Not Required in Prospectus

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the estimated costs and expenses, other than underwriting discounts and commissions, payable by the Registrant in connection with the sale of the securities being registered.

Securities and Exchange Commission registration fee	\$	†
Accounting fees and expenses		*
Legal fees and expenses		*
Printing expenses		*
Transfer agent fees and expenses		*
Miscellaneous		*
Total	\$	*

† The SEC registration fee is being deferred pursuant to Rules 456(b) and 457(r) of the Securities Act of 1933, as amended, or the Securities Act, except for the fee related to \$350,000,000 of our common shares that may be issued and sold under a sales agreement with Jefferies LLC and Stifel, Nicolaus & Company, Incorporated, a portion of which was previously paid in connection with the previous registration of \$250,000,000 of our common shares pursuant to a prospectus supplement, filed with the SEC on March 1, 2022.

* These fees and expenses depend on the securities offered and the number of issuances, which are indeterminable, and accordingly cannot be estimated as of the date of this prospectus. An estimate of the aggregate expenses in connection with the sale and distribution of the securities being offered will be included in the applicable prospectus supplement.

Item 15. Indemnification of Directors and Officers

Under the Canada Business Corporations Act, or CBCA, we may indemnify our current or former directors or officers or any other individuals who act or have acted at our request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges, and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of his or her association with us or the other entity. The CBCA also provides that we may advance moneys to a director, officer or other individual for costs, charges and expenses reasonably incurred in connection with such a proceeding. The individual shall repay the moneys to us if indemnification of the individual is ultimately prohibited under the CBCA, as described below.

Indemnification is prohibited under the CBCA unless the individual:

- acted honestly and in good faith with a view to our best interests, or the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at our request;
- in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that his or her conduct was lawful; and
- was not judged by the court or other competent authority to have committed any fault or omitted to do anything that the individual ought to have done.

Our by-laws require us to indemnify each of our directors, officers, former directors and officers and persons who act or acted at our request as a director or officer, or in a similar capacity, of a body corporate. We will indemnify such individual against all costs, charges and expenses, including an amount paid to settle an action or proceeding to which the individual is made a party by reason of being or having been a director or officer of us or such body corporate. Our by-laws also require us to, with the approval of a court, indemnify such individual referred to above, in respect of an action by or on behalf of us or such body corporate to procure a judgment in its favor, to which the individual is made a party by reason of being or having been a director or an officer of us or such body corporate, against all costs, charges and expenses reasonably incurred by him in connection with such action. However, we shall not indemnify such individual if the individual did not act honestly and in good faith with a view to our best interests or, in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual did not have reasonable grounds for believing that his or her conduct was lawful.

Our by-laws authorize us, with the approval of our board of directors, to purchase and maintain insurance for the benefit of each of our current or former directors or officers and each person who acts or acted at our request as a director or officer of another entity, against any liability incurred by him or her.

We have indemnification agreements with each of our directors and certain officers. As provided by our by-laws, these agreements, among other things, indemnify each director and officer to the fullest extent permitted by Canadian law, including indemnification of all costs, charges and expenses reasonably incurred by such person in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or officer; provided that, we will not indemnify such individual if, among other things, he or she did not act honestly and in good faith with a view to our best interests and, in the case of a criminal or penal action, the individual did not have reasonable grounds for believing that his or her conduct was lawful.

We have purchased insurance policies which, within the limits and subject to the terms and conditions thereof, cover certain expenses and liabilities that may be incurred by our directors and officers in connection with proceedings that may be brought against them as a result of an act or omission committed or suffered while acting as a director or officer.

Insofar as indemnification of liabilities arising under the Securities Act may be permitted to members of our board of directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 16. Exhibits

Exhibit Number	Description of Document	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
1.1*	Form of Underwriting Agreement.				
1.2	At-the-Market Equity Offering Sales Agreement, dated August 6, 2020, between Xenon Pharmaceuticals Inc. and the Agents named therein.	8-K	001-36687	1.1	August 6, 2020
1.3	Amendment No. 1 to At-the-Market Equity Offering Sales Agreement, dated March 1, 2022.	8-K	001-36687	1.1	March 1, 2022
3.1	Articles of the Registrant.	10-Q	001-36687	3.1	December 15, 2014
3.1A	Articles of Amendment to the Articles of the Registrant.	8-K	001-36687	3.1	March 28, 2018
3.2	Amended and Restated By-laws of the Registrant.	10-Q	001-36687	3.2	December 15, 2014
4.1	Form of Common Share Certificate.	S-1/A	333-198666	4.1	October 6, 2014
4.2*	Form of Preferred Share Certificate.				
4.3*	Form of Warrant Agreement.				
4.4*	Form of Warrant Certificate.				
4.5*	Form of Unit Agreement.				
5.1	Opinion of Blake, Cassels & Graydon LLP.				
5.2	Opinion of Blake, Cassels & Graydon LLP.				
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.				
23.2	Consent of Blake, Cassels & Graydon LLP (included in Exhibit 5.1).				
23.3	Consent of Blake, Cassels & Graydon LLP (included in Exhibit 5.2).				
24.1	Power of Attorney (included on the signature page).				
107	Filing Fee Table.				

* If applicable, to be filed by amendment or as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.

Item 17. Undertakings

(a) The undersigned Registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (ii), and (iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) that, for the purpose of determining liability under the Securities Act to any purchaser:

(i) each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) that, for the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv) any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(6) that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding), is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

Signatures

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Burnaby, British Columbia, Canada on August 9, 2024.

XENON PHARMACEUTICALS INC.

By: /s/ Ian Mortimer

Ian Mortimer

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Ian Mortimer and Sherry Aulin as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities (including his or her capacity as a director and/or officer of Xenon Pharmaceuticals Inc.) to sign any and all amendments to this registration statement, including post-effective amendments, and registration statements filed pursuant to Rule 462 under the Securities Act, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
<hr/> <i>/s/ Ian Mortimer</i> Ian Mortimer	President, Chief Executive Officer and Director (Principal Executive Officer)	August 9, 2024
<hr/> <i>/s/ Sherry Aulin</i> Sherry Aulin	Chief Financial Officer (Principal Financial and Accounting Officer)	August 9, 2024
<hr/> <i>/s/ Dawn Svoronos</i> Dawn Svoronos	Chair of the Board of Directors	August 9, 2024
<hr/> <i>/s/ Gillian Cannon</i> Gillian Cannon	Director	August 9, 2024
<hr/> <i>/s/ Steve Gannon</i> Steve Gannon	Director	August 9, 2024
<hr/> <i>/s/ Elizabeth Garofalo</i> Elizabeth Garofalo	Director	August 9, 2024
<hr/> <i>/s/ Justin Gover</i> Justin Gover	Director	August 9, 2024
<hr/> <i>/s/ Patrick Machado</i> Patrick Machado	Director	August 9, 2024
<hr/> <i>/s/ Gary Patou</i> Gary Patou	Director	August 9, 2024



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

August 9, 2024

Reference:191296/1

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

RE: Registration Statement on Form S-3 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 Registration Statement on Form S-3 (the “**Registration Statement**”) to be filed by the Company with the U.S. Securities and Exchange Commission (the “**SEC**”) relating to the registration under the Securities Act of 1933, as amended (the “**Act**”), of the Securities (as defined below). The Registration Statement relates to the proposed offer, issuance and sale by the Company, from time to time as set forth in the Registration Statement, the prospectus contained therein (the “**Prospectus**”) and the supplements referred to therein (the “**Prospectus Supplements**”), of an unlimited number of (a) common shares of the Company (the “**Common Shares**”), (b) preferred shares of the Company (the “**Preferred Shares**”), (c) warrants of the Company (the “**Warrants**”) to purchase Common Shares or Preferred Shares, and (d) units of the Company (the “**Units**”) consisting of Common Shares, Preferred Shares, Warrants or any combination of the foregoing (the Common Shares, Preferred Shares, Warrants and Units are collectively referred to herein as the “**Securities**”), all of which may be issued from time to time on a delayed or continuous basis pursuant to Rule 415 under the Act.

ASSUMPTIONS

We have examined instruments, documents, certificates and records which we have deemed relevant and necessary for the basis of our opinions hereinafter expressed. In such examination, we have assumed:

- (a) the authenticity of documents purporting to be originals or photostatic or facsimile copies of originals;
 - (b) the conformity to originals of documents purporting to be photostatic or facsimile copies of originals;
 - (c) the genuineness of all signatures on all documents reviewed by us;
 - (d) the truth, accuracy and completeness of the information, representations and warranties contained in the records, documents, instruments and certificates we have reviewed;
 - (e) at the time of any offer and sale of the Securities, the Company will validly exist and be duly qualified and in good standing under the *Canada Business Corporations Act*;
 - (f) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective under the Act;
 - (g) a Prospectus Supplement will have been filed with the SEC describing the Securities offered thereby;
-



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

- (h) all Securities will be issued and sold in compliance with applicable provincial, Federal and state securities laws and in the manner stated in the Registration Statement and the applicable Prospectus Supplement;
- (i) a definitive purchase, underwriting, placement agency or similar agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto;
- (j) the Warrants and any agreements executed and delivered by the Company with respect to the Warrants, including the certificates representing the Warrants (collectively, the "**Warrant Documents**"), will be governed by and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein;
- (k) the Units and any agreements executed and delivered by the Company with respect to the Units, including the certificates representing the Units (collectively, the "**Unit Documents**"), will be governed by and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein;
- (l) insofar as any obligation under any of the Warrant Documents or Unit Documents applicable to the Warrants or the Units, respectively, is to be performed in any jurisdiction outside of the Province of British Columbia, its performance will not be illegal or unenforceable by virtue of the laws of that other jurisdiction;
- (m) any Securities issuable upon conversion, exchange, redemption, or exercise of any Securities being offered will be duly authorized, created and, if appropriate, allotted and reserved for issuance upon such conversion, exchange, redemption or exercise; and
- (n) with respect to the Common Shares or Preferred Shares offered by the Company, there will be sufficient Common Shares or Preferred Shares authorized under the Company's organizational documents and not otherwise reserved for issuance.

We have also considered such questions of law as we have deemed relevant and necessary as a basis for our opinions hereinafter expressed. With respect to the accuracy of factual matters material to our opinions hereinafter expressed, we have relied upon certificates or comparable documents and representations of public officials and of officers and representatives of the Company.

The opinions expressed herein are limited to matters governed by the laws of the Province of British Columbia and the laws of Canada applicable therein.

Opinions

Based and relying upon the foregoing, and subject to the qualifications hereinafter expressed, we are of the opinion that:

1. With respect to the Common Shares, when (a) the Board of Directors of the Company or a duly constituted and acting committee thereof (such Board of Directors or committee being hereinafter referred to as the "**Board**") has taken all necessary corporate action to approve the issuance of and the terms of the offering of such Common Shares and all matters related thereto and (b) the Common Shares have been delivered either (i) in accordance with the applicable definitive purchase, underwriting, placement agency or similar agreement approved by the Board, or upon the exercise of
-



Warrants to purchase Common Shares, upon full payment of the consideration therefor provided for therein, or (ii) upon conversion or exercise of any other Security, in accordance with the terms of such Security or the instrument governing such Security providing for such conversion or exercise as approved by the Board, for the full consideration approved by the Board, then such Common Shares will be validly issued, fully paid and non-assessable shares in the capital of the Company.

2. With respect to any particular series of Preferred Shares, when (a) the Board has taken all necessary corporate action to approve the issuance and terms of such Preferred Shares, the terms of the offering thereof, and all matters related thereto, including all applicable regulatory filings and (b) such Preferred Shares have been delivered either (i) in accordance with the applicable definitive purchase, underwriting, placement agency or similar agreement approved by the Board, or upon exercise of Warrants to purchase such Preferred Shares, upon full payment of consideration provided for therein, or (ii) upon conversion or exercise of any other Security, in accordance with the terms of such Security or the instrument governing such Security providing for such conversion or exercise as approved by the Board, for the full consideration approved by the Board, then such Preferred Shares will be validly issued, fully paid and non-assessable shares in the capital of the Company.
3. With respect to the Warrants, when (a) the Board has taken all necessary corporate action to approve the issuance of and the terms of the Warrants and all matters related thereto and (b) the Warrants have been duly executed and delivered against full payment therefor, pursuant to the applicable definitive purchase, underwriting, warrant, placement agency or similar agreement duly authorized, executed and delivered by the Company and a warrant agent and the certificates for the Warrants have been duly executed and delivered by the Company and such warrant agent, then the Warrants will be validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
4. With respect to the Units, when (a) the Board has taken all necessary corporate action to approve the issuance of and the terms of the Units (including Securities underlying the Units) and all matters related thereto and (b) the Units (including Securities underlying the Units) have been duly executed and delivered against payment therefor, pursuant to the applicable definitive purchase, underwriting, unit, placement agency or similar agreement duly authorized, executed and delivered by the Company and the certificates for the Units have been duly executed and delivered in accordance with such purchase, underwriting, unit, placement agency or similar agreement, then the Units (including Securities underlying the Units) will be validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

QUALIFICATIONS

The opinions expressed above are subject to the following qualifications:

- (a) the opinions set forth herein are limited to matters governed by, and apply solely in connection to, the laws of the province of British Columbia and the laws of Canada applicable in British Columbia, in each case as they exist on the date of this opinion letter;
 - (b) the headings appearing in this opinion are for the convenience of reference only and in no way limit or enlarge the scope or meaning of the opinions expressed above;
-



- (c) the enforceability of the Warrants and the Units is subject to bankruptcy, insolvency, reorganization, arrangement, winding-up, moratorium and other laws of general application limiting the enforcement of creditors' rights generally;
 - (d) the enforceability of the Warrants and the Units is subject to general equitable principles, including the fact that the availability of equitable remedies, such as injunctive relief and specific performance, is in the discretion of a court;
 - (e) the enforceability of any provision in any of the Warrant Documents or Unit Documents applicable to the Warrants or the Units, respectively, that purports to sever from such Warrants or Units, as the case may be, any provision that is prohibited or unenforceable under applicable law without affecting the enforceability of the remainder of such Warrants or Units, as the case may be, would be determined only in the discretion of a court;
 - (f) the recoverability of costs and expenses may be limited to those a court considers to be reasonably incurred and the costs and expenses incidental to all court proceedings are in the discretion of the court, and the court has the power to determine by whom and to what extent these costs shall be paid;
 - (g) the enforceability of any rights of indemnity or contribution in any of the Warrant Documents or Unit Documents applicable to the Warrants or the Units, respectively, may be limited by applicable law to the extent that such rights directly or indirectly relate to liabilities imposed by law for which it would be contrary to public policy to require a person to provide indemnification or contribution;
 - (h) the enforceability of the Warrants and the Units is subject to the provisions of the *Limitations Act* (British Columbia);
 - (i) courts in Canada are precluded from giving a judgment in any currency other than the lawful money of Canada;
 - (j) we express no opinion as to:
 - A. the enforceability of any provision in any of the Warrant Documents or Unit Documents applicable to the Warrants or the Units, respectively, to the extent it purports to exculpate a person from a liability or duty otherwise owed by it, waives rights or defenses or agrees not to challenge the validity or enforceability of remedies;
 - B. the enforceability of any provision in any of the Warrant Documents or Unit Documents applicable to the Warrants or the Units, respectively, that states that amendments or waivers of or with respect to the Warrants or the Units, as the case may be, that are not in writing will not be effective;
 - C. the enforceability of any provision in any of the Warrant Documents or Unit Documents applicable to the Warrants or the Units, respectively, to the extent it purports to exculpate any person from liability in respect of acts or omissions that may be illegal, fraudulent or involve willful misconduct; and
 - D. the enforceability of any provision in any of the Warrant Documents or Unit Documents applicable to the Warrants or the Units, respectively, purporting to confer any benefits thereunder on any third party;
-



Blake, Cassels & Graydon LLP
Barristers & Solicitors
Patent & Trademark Agents
1133 Melville Street
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Vancouver, B.C. V6E 4E5 Canada
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- (k) we express no opinion as to compliance with the *Personal Information Protection and Electronic Documents Act* (Canada) or the *Personal Information Protection Act* (British Columbia); and
- (l) a court may decline to accept the factual and legal determinations of a party notwithstanding that a contract or instrument provides that the determinations of that party shall be conclusive.

* * *

We hereby expressly consent to the filing of this opinion as an exhibit to the Registration Statement, and the use of our firm name wherever it appears in the Registration Statement, the Prospectus, any Prospectus Supplement, and in any amendment or supplement thereto. In giving this consent, we do not admit that we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations promulgated thereunder.

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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Exhibit 5.2

August 9, 2024

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\$350,000,000 of common shares in the capital of the Company (the “**Shares**”) pursuant to a Registration Statement on Form S-3 (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**”), and the two prospectuses included in the Registration Statement: (i) the base prospectus (the “**Base Prospectus**”), and (ii) the sales agreement prospectus related to the Shares (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 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

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated February 29, 2024, with respect to the consolidated financial statements of Xenon Pharmaceuticals Inc. (the Entity) which comprise the consolidated balance sheets as of December 31, 2023 and 2022, the related consolidated statements of operations and comprehensive loss, shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes, and our report dated February 29, 2024 on the effectiveness of the Entity's internal control over financial reporting as of December 31, 2023, which are incorporated by reference and to the reference to our firm under the heading "Experts" in the prospectus included in Form S-3 dated August 9, 2024 of the Entity.

/s/ KPMG LLP

Chartered Professional Accountants

August 9, 2024
Vancouver, Canada

Calculation of Filing Fee Tables
Form S-3ASR
(Form Type)
Xenon Pharmaceuticals, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities and Carry Forward Securities

Security Type	Security Class Title	Fee Calculation		Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to Be Carried Forward	
		Forward Rule	Amount Registered									
Fees to Be Paid												
Equity	Common Shares, no par value per share (1)	456(b) and 457(r)	(1)	(1)	(1)	(2)	(2)					
Equity	Preferred Shares, no par value per share (1)	456(b) and 457(r)	(1)	(1)	(1)	(2)	(2)					
Other	Warrants (1)	456(b) and 457(r)	(1)	(1)	(1)	(2)	(2)					
Other	Units (1) (3)	456(b) and 457(r)	(1)	(1)	(1)	(2)	(2)					
Equity	Common Shares, no par value per share (1)	457(o)	\$ 350,000,000	—	\$ 350,000,000	0.00014	\$ 51,660.00					
Carry Forward Securities												
Equity	Common Shares, no par value per share	415(a)(6)	\$ 219,708,751	(4)	\$ 219,708,751	(4)	—	424(b)(5)(4)	333-260010(4)	March 1, 2022	(4) 20,367.00	
Total Offering Amounts							\$ 51,660.00	(4)				
Total Fees Previously Paid							\$ 20,367.00					
Total Fee Offsets							\$ —					
Net Fee Due							\$ 31,293.00	(4)				

- (1) The registrant is registering hereby an unspecified amount of securities of each identified class as may be offered, from time to time, hereunder, along with an indeterminate number of securities that may be issued upon exercise, settlement, exchange or conversion of securities offered or sold hereunder. Separate consideration may or may not be received for securities that are issued upon conversion, exercise or exchange of other securities.
- (2) In accordance with Rules 456(b) and 457(r) under the Securities Act of 1933, as amended (the “Securities Act”), the registrant is deferring payment of all registration fees and will pay the registration fees subsequently in advance or on a “pay-as-you-go” basis.
- (3) Units may be issued under a unit agreement and will represent an interest in one or more securities including shares of common stock or preferred stock, debt securities, or warrants, in any combination, which may or may not be separable from one another.
- (4) Pursuant to Rule 415(a)(6) under the Securities Act, the securities registered pursuant to this registration statement include \$219,708,751 of unsold shares (the “Unsold Securities”) of common shares, no par value per share (the “Common Shares”) previously registered pursuant to a prospectus supplement, filed with the Securities and Exchange Commission (the “SEC”) on March 1, 2022 (the “Prior Prospectus Supplement”), to the Registration Statement on Form S-3 (File No. 333-260010), which was filed with the SEC and became automatically effective on October 4, 2021 (the “Prior Registration Statement”), relating to the offer and sale of Common Shares having an aggregate offering price of up to \$250,000,000 under its current “at-the-market” program. In connection with the filing of the Prior Prospectus Supplement, \$23,175 was due and the registrant applied a fee of \$16,354.14 previously paid relating to \$124,005,112.11 of unsold Common Shares pursuant to Rule 457(p) under the Securities Act which remained unsold under a prospectus supplement, dated June 3, 2020, to the Prior Registration Statement. As of the date of this registration statement, Common Shares having an aggregate offering price of up to \$219,708,751 were not sold under the Prior Prospectus Supplement, multiplied by the fee rate of \$0.0000927 at the time results in the registration fee of \$20,367.00 that has already been paid and remains unused with respect to the Unsold Securities will be applied to Common Shares that are being registered pursuant to this registration statement. Pursuant to Rule 415(a)(6), the offering of the Unsold Securities under the Prior Registration Statement will be deemed terminated as of the date of effectiveness of this registration statement.

