



**Xenon Pharmaceuticals Inc.**

**Offering of 4,000,000 Common Shares**

*The information in this free writing prospectus relates only to the offering of common shares offered pursuant to our preliminary prospectus supplement dated September 7, 2016 and should be read together with such preliminary prospectus supplement, the accompanying prospectus dated January 5, 2016 and the documents incorporated by reference therein.*

*The information in this free writing prospectus updates and, to the extent inconsistent, supersedes the information in the preliminary prospectus supplement. You should read the entire preliminary prospectus supplement, accompanying prospectus and documents incorporated by reference therein carefully, especially the “Risk Factors” sections and the financial statements and related notes, before deciding to invest in our common shares. Unless the context requires otherwise, references in this free writing prospectus to “Xenon,” “the Company,” “we,” “us” and “our” refer to Xenon Pharmaceuticals Inc.*

<b>Issuer:</b>	Xenon Pharmaceuticals Inc., a corporation continued under the Federal laws of Canada
<b>Ticker / Exchange for common shares:</b>	XENE / The NASDAQ Global Market
<b>Pricing date:</b>	September 8, 2016
<b>Settlement date:</b>	September 13, 2016
<b>Common shares offered by us:</b>	3,000,000 common shares (or 3,450,000 common shares if the underwriters’ option to purchase an additional 450,000 common shares is exercised in full).
<b>Common shares offered by selling securityholders</b>	1,000,000 common shares (or 1,150,000 common shares if the underwriters’ option to purchase an additional 150,000 common shares is exercised in full).
<b>Option to purchase additional shares</b>	We and the selling securityholders have granted the underwriters an option to purchase up to 450,000 additional common shares and 150,000 additional common shares, respectively. This option is exercisable, in whole or in part, for a period of 30 days from September 8, 2016.
<b>Common shares to be outstanding after this offering:</b>	17,415,347 common shares (17,865,347 shares if the underwriters elect to exercise in full their option to purchase additional shares from us).

**Public offering price:** \$7.50 per common share

**Underwriting discounts and commissions:** \$0.45 per common share

**Net proceeds:** We estimate that the net proceeds to us from this offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$20.7 million, or approximately \$23.8 million if the underwriters exercise their option to purchase additional shares from us in full.

We will not receive any of the proceeds from the sale of common shares by the selling securityholders.

**Dilution:** The information appearing under the caption “Dilution” on page S-44 of the preliminary prospectus supplement is updated as follows: After giving effect to our issuance and sale of common shares in this offering at the public offering price of \$7.50 per common share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, the as adjusted net tangible book value as of June 30, 2016 would have been \$73.3 million, or \$4.21 per common share. This represents an immediate increase in as adjusted net tangible book value to existing shareholders of \$0.56 per common share and an immediate dilution to new investors purchasing common shares in this offering of \$3.29 per common share.

If the underwriters exercise their option to purchase additional common shares from us in full, at the public offering price of \$7.50 per common share, the as adjusted net tangible book value will increase to \$76.5 million, or \$4.28 per common share, representing an immediate increase in net tangible book value to existing shareholders of \$0.63 per common share and immediate dilution in net tangible book value of \$3.22 per common share to new investors.

**Selling securityholders:** The information appearing under the caption “Selling Securityholders” on page S-52 of the preliminary prospectus supplement is updated as follows: The number of common shares being offered by August J. Troendle is 572,037 and the number of common shares being offered by entities affiliated with InterWest Management Partners VII, LLC is 427,963. After the offering, August J. Troendle will own 505,204 (2.9%) of our common shares (or 419,398 (2.3%) if the underwriters exercise in full their option to purchase additional common shares) and entities affiliated with InterWest Management Partners VII, LLC will own 378,098 (2.2%) of our common shares (or 313,904 (1.8%) if the underwriters exercise in full their option to purchase additional common shares).

Xenon has filed a registration statement (including a base prospectus dated January 5, 2016 and the preliminary prospectus supplement dated September 7, 2016) with the Securities and Exchange Commission (the "SEC") for the offering to which this communication relates. Before investing in the offering, you should read the preliminary prospectus supplement and the accompanying prospectus for the offering, and the information incorporated therein by reference, and the other documents Xenon has filed with the SEC for more complete information about Xenon and the offering. You may get these documents for free by visiting EDGAR on the SEC web site at [www.sec.gov](http://www.sec.gov). Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the preliminary prospectus supplement and the accompanying prospectus if you request it by contacting Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, 2nd Floor, New York, NY 10022, or by email at [Prospectus\\_Department@Jefferies.com](mailto:Prospectus_Department@Jefferies.com), or by telephone at (877) 821-7388; from Stifel, Nicolaus & Company, Incorporated, One Montgomery Street, Suite 3700, San Francisco, California 94104, Attn: Syndicate, or by telephone at (415) 364-2720 or by email at [syndprospectus@stifel.com](mailto:syndprospectus@stifel.com); or from Guggenheim Securities, LLC, Attention: Equity Syndicate Department, 330 Madison Avenue, 8th Floor, New York, NY 10017, or by telephone at 212-518-9658, or by email at [GSEquityProspectusDelivery@guggenheimpartners.com](mailto:GSEquityProspectusDelivery@guggenheimpartners.com).

The common shares are being qualified for distribution by way of a preliminary prospectus supplement and a final prospectus supplement to Xenon's Canadian base shelf prospectus dated December 30, 2015 that was filed with the securities commissions in British Columbia, Alberta and Ontario. No securities are being offered or sold, directly or indirectly, in Canada or to any resident of Canada.