

## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

OMB Number: 3235-0104

Estimated average burden

hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934  
or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>HOLLER FRANK A</u>	2. Date of Event Requiring Statement (Month/Day/Year) 11/04/2014	3. Issuer Name and Ticker or Trading Symbol <u>Xenon Pharmaceuticals Inc. [ XENE ]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director Officer (give title below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 11/04/2014
(Last) (First) (Middle) <u>C/O XENON PHARMACEUTICALS INC.</u> <u>200 - 3650 GILMORE WAY</u>		10% Owner Other (specify below)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
(Street) <u>BURNABY A1</u> <u>V5G 4W8</u>			
(City) (State) (Zip)			

## Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Shares	70,891 <sup>(1)</sup>	D	
Common Shares	243 <sup>(1)</sup>	I	By wife

Table II - Derivative Securities Beneficially Owned  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series A Preferred Shares	(2)	(3)	Common Shares	95,002 <sup>(1)</sup>	0.00	D	
Series A Preferred Shares	(2)	(3)	Common Shares	941 <sup>(1)</sup>	0.00	I	By wife
Series B Preferred Shares	(2)	(3)	Common Shares	4,988 <sup>(1)(19)</sup>	0.00	D	
Series E Preferred Shares	(4)	(3)	Common Shares	2,737 <sup>(1)</sup>	0.00	D	
Stock Option (Right to Buy)	(5)	03/31/2015 <sup>(18)</sup>	Common Shares	2,057 <sup>(1)</sup>	4.98 <sup>(6)</sup>	D	
Stock Option (Right to Buy)	(7)	12/31/2015	Common Shares	2,057 <sup>(1)</sup>	5.22 <sup>(6)</sup>	D	
Stock Option (Right to Buy)	(8)	12/31/2016	Common Shares	12,345 <sup>(1)</sup>	3.21 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(10)	12/31/2017	Common Shares	3,086 <sup>(1)</sup>	3.77 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(11)	06/26/2018	Common Shares	3,086 <sup>(1)</sup>	3.7 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(10)	12/31/2018	Common Shares	3,086 <sup>(1)</sup>	3.07 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(10)	02/01/2019	Common Shares	25,720 <sup>(1)</sup>	3 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(10)	12/31/2019	Common Shares	3,086 <sup>(1)</sup>	3.56 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(12)	12/31/2020	Common Shares	3,086 <sup>(1)</sup>	3.76 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(12)	12/31/2020	Common Shares	36,008 <sup>(1)</sup>	3.76 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(13)	12/31/2021	Common Shares	3,086 <sup>(1)</sup>	3.67 <sup>(9)</sup>	D	
Stock Option (Right to Buy)	(13)	12/31/2021	Common Shares	5,144 <sup>(1)</sup>	3.67 <sup>(10)</sup>	D	
Stock Option (Right to Buy)	(14)	12/31/2022	Common Shares	3,086 <sup>(1)</sup>	2.68 <sup>(15)</sup>	D	
Stock Option (Right to Buy)	(14)	12/31/2022	Common Shares	4,115 <sup>(1)</sup>	2.68 <sup>(15)</sup>	D	
Stock Option (Right to Buy)	(16)	01/31/2024	Common Shares	1,440 <sup>(1)</sup>	9.85 <sup>(17)</sup>	D	
Stock Option (Right to Buy)	(16)	01/31/2024	Common Shares	3,086 <sup>(1)</sup>	9.85 <sup>(17)</sup>	D	

## Explanation of Responses:

- Reflects a 1-for-4.86 reverse stock split of the Issuer's outstanding shares effected October 1, 2014 (the "Reverse Stock Split").
- Reflects the automatic conversion of each share of Series A Preferred Shares and Series B Preferred Shares into one share of Common Shares to occur upon the closing of the Issuer's initial public offering.
- Each share has no expiration date.
- Reflects the automatic conversion of each share of Series E Preferred Shares into 1.2 shares of Common Shares to occur upon the closing of the Issuer's initial public offering.

5. The shares subject to the option fully vested on January 1, 2008.
6. The exercise price was converted from \$6.07 CAD using the closing rate of exchange of the Bank of Canada on the date of grant, after giving effect to the Reverse Stock Split. The actual exercise price is the Canadian dollar amount regardless of the exchange rate on the date of exercise.
7. The shares subject to the option fully vested on January 1, 2009.
8. The shares subject to the option fully vested on January 1, 2010.
9. The exercise price was converted from \$3.74 CAD using the closing rate of exchange of the Bank of Canada on the date of grant, after giving effect to the Reverse Stock Split. The actual exercise price is the Canadian dollar amount regardless of the exchange rate on the date of exercise.
10. The shares subject to the option fully vested on January 1, 2011.
11. The shares subject to the option fully vested on June 26, 2011.
12. The shares subject to the option fully vested on January 1, 2014.
13. 1/3 of the shares subject to the Option vested on January 1, 2013 (the "2012 Vesting Commencement Date") and thereafter the remaining 2/3 of the shares subject to the Option vest each monthly anniversary of the 2012 Vesting Commencement Date over the following 2 years.
14. 1/3 of the shares subject to the Option vested on January 1, 2014 (the "2013 Vesting Commencement Date") and thereafter the remaining 2/3 of the shares subject to the Option vest each monthly anniversary of the 2013 Vesting Commencement Date over the following 2 years.
15. The exercise price was converted from \$2.67 CAD using the closing rate of exchange of the Bank of Canada on the date of grant, after giving effect to the Reverse Stock Split. The actual exercise price is the Canadian dollar amount regardless of the exchange rate on the date of exercise.
16. 1/3 of the shares subject to the Option vest on January 14, 2015 (the "2014 Vesting Commencement Date") and thereafter the remaining 2/3 of the shares subject to the Option vest each monthly anniversary of the 2014 Vesting Commencement Date over the following 2 years.
17. The exercise price was converted from \$10.78 CAD using the closing rate of exchange of the Bank of Canada on the date of grant, after giving effect to the Reverse Stock Split. The actual exercise price is the Canadian dollar amount regardless of the exchange rate on the date of exercise.
18. The shares subject to this option were due to expire on January 10, 2014. Pursuant to the Issuer's Amended and Restated Stock Option Plan, the expiration date of this option has been extended until five business days following the expiration of the Lock-up Agreement entered into in connection with the Issuer's initial public offering. The Lock-up Agreement will expire 180 days after the date of the final prospectus related to the initial public offering, or March 31, 2015.
19. The Reporting Person's previous Form 3 erroneously omitted the Series B Preferred Shares owned by the Reporting Person.

**Remarks:**

/s/ Barbara A. Mery, Attorney- 11/06/2014  
in-fact

\*\* Signature of Reporting Person      Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 5 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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