FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

	OMB APPRO	OVAL						
	OMB Number:	3235-0287						
l	Estimated average burden							
l	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* HOLLER FRANK A						2. Issuer Name and Ticker or Trading Symbol Xenon Pharmaceuticals Inc. [XENE]											olicable)	,	Person(s) to Issuer 10% Owner	
(Last) (First) (Middle) C/O XENON PHARMACEUTICALS INC 200 - 3650 GILMORE WAY						3. Date of Earliest Transaction (Month/Day/Year) 08/16/2016 4. If Amendment, Date of Original Filed (Month/Day/Year)									Officer (give title below) Other (specify below) 6. Individual or Joint/Group Filing (Check Applications)				·)``	
(Street) BURNABY A1 V5G 4W8 (City) (State) (Zip)															X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(Oity)		,	le I - Noi	n-Deriva	ative :	Sec	uritie	s Acc	uired.	Disi	posed o	f. or	Bene	efici	ally (Owne	ed			
1. Title of Security (Instr. 3) 2. Trans					2. Transaction Date (Month/Day/Year)		2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transa Code (ection	4. Securities Acquired (A)					5. Amo Securi Benefi Owne	ount of ities icially d Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership	
									Code	v	Amount	(A) or D)	Price	;		ted action(s) 3 and 4)		(Instr. 4)	
Common	Shares	2016			S		6,863		D	\$8.25		169,006		D						
Common Shares 08/17/									S		1,600		D	\$7.89(1)		167,406		D		
Common Shares 08/1						3/2016					9,599		D	\$7.7(2)		157,807		D		
Common	ommon Shares															:	1,184	I	By Spouse	
		Та	able II - I (sed of, onvertib					vned				
1. Title of Derivative Security (Instr. 3)	rivative Conversion Date Execution Date (Month/Day/Year) if any			Date,	4. Transaction Code (Instr 8)		5. Nur of Derive Secur Acqu (A) or Dispo of (D) (Instr and 5	ative rities ired osed	6. Date E Expiratio (Month/D	n Date	•	7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)		ount	Deriv	ivative curity etr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	

Explanation of Responses:

1. The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price, respectively, of shares sold. These shares were sold in multiple transactions at prices ranging from \$7.89 to \$7.90 inclusive. The reporting person undertakes to provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, full information regarding the number of shares sold at each separate price within the range set forth herein.

2. The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price, respectively, of shares sold. These shares were sold in multiple transactions at prices ranging from \$7.70 to \$7.71, inclusive. The reporting person undertakes to provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, full information regarding the number of shares sold at each separate price within the range set forth herein.

/s/ Joanne Smartt, Attorney-in-

08/18/2016

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 4 (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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.