UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): January 13, 2020

XENON PHARMACEUTICALS INC.

(Exact name of Registrant as Specified in Its Charter)

Canada (State or Other Jurisdiction of Incorporation) 001-36687

(Commission File Number)

200-3650 Gilmore Way Burnaby, British Columbia, Canada (Address of Principal Executive Offices) 98-0661854 (IRS Employer Identification No.)

> V5G 4W8 (Zip Code)

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

Not Applicable

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

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

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

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

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

Emerging growth company \Box

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

Item 8.01 Other Events

On November 5, 2019, Xenon Pharmaceuticals Inc. (the "Company") entered into an at-the-market equity offering sales agreement (the "Agreement") with Jefferies LLC ("Jefferies") and Stifel, Nicolaus & Company, Incorporated ("Stifel") to sell common shares of the Company having aggregate sales proceeds of up to \$50.0 million, from time to time, through an "at the market" equity offering program under which Jefferies and Stifel act as sales agents. As of January 13, 2020, the Company has sold an aggregate of 3,252,330 common shares for gross proceeds of \$50.0 million and net proceeds of approximately \$48.8 million, net of commissions paid. The most recent sales of common shares pursuant to the Agreement are expected to close on or about January 14, 2020.

SIGNATURES

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

XENON PHARMACEUTICALS INC.

By: /s/ Ian Mortimer

Ian Mortimer President & Chief Financial Officer

Date: January 13, 2020