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): May 9, 2017

XENON PHARMACEUTICALS INC.

(Exact name of Registrant as Specified in Its Charter)

Canada	**001-36687**	**98-0661854**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

200-3650 Gilmore Way **Burnaby, British Columbia, Canada** **(Address of Principal Executive Offices)**	**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 Instructions 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))

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 ☒

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. ☒

Item 2.02 Results of Operations and Financial Condition

On May 9, 2017, Xenon Pharmaceuticals Inc. (the "Company") announced via press release the Company's financial results for the three month period ended March 31, 2017. A copy of the Company's press release is attached hereto as Exhibit 99.1. The information in this Form 8-K and the attached exhibit are furnished to, but not filed with, the Securities and Exchange Commission.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

Pursuant to the rules and regulations of the Securities and Exchange Commission, the attached exhibit is deemed to have been furnished to, but not filed with, the Securities and Exchange Commission:

Exhibit Number	**Description**
99.1	Press Release issued by Xenon Pharmaceuticals Inc. dated May 9, 2017.

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 hereunto duly authorized.

Xenon Pharmaceuticals Inc.

Date: May 9, 2017

By: /s/ *Ian Mortimer*

Ian Mortimer

Chief Financial Officer & Chief Operating Officer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Press Release issued by Xenon Pharmaceuticals Inc. dated May 9, 2017.

XENON

NEWS RELEASE

Xenon Pharmaceuticals Reports First Quarter 2017 Financial Results and Provides Corporate Update

BURNABY, British Columbia, May 9, 2017 -- Xenon Pharmaceuticals Inc. (Nasdaq:XENE), a clinical-stage biopharmaceutical company today, reported its financial results for the quarter ended March 31, 2017, and provided a corporate update for 2017.

Dr. Simon Pimstone, Xenon's President and Chief Executive Officer, said, “We continue to leverage our expertise in human genetics and ion channel targets to advance our neurology-focused product candidates and identify potential new therapeutic assets. In addition to our two partnered programs in pain and our proprietary XEN901 epilepsy program, we recently expanded our ion channel, neurology-focused pipeline to include XEN1101, a Kv7 potassium channel opener for the treatment of epilepsy.”

Dr. Pimstone added, “We are positioned to see a number of key events in the coming months including topline data expected mid-year from the Phase 2b clinical trial of TV-45070 in post-herpetic neuralgia being conducted by our collaborator, Teva. We anticipate Genentech will advance GDC-0310 into a Phase 2 clinical trial this year. Within our proprietary programs, we anticipate that XEN1101 will be in a Phase 1 clinical trial in the fourth quarter of 2017. In addition, we look forward to filing an IND, or IND equivalent application, for XEN901 in the fourth quarter of this year.”

Achievements and Anticipated Milestones

Proprietary Pipeline

- XEN1101 is a next-generation Kv7 potassium channel opener for the treatment of epilepsy. Pre-clinically, XEN1101 has demonstrated improved pharmacokinetics, selectivity, potency and efficacy over first-generation potassium channel modulators, such as ezogabine. Xenon anticipates filing an investigational new drug (IND), or IND equivalent, application to initiate a Phase 1 first-in-man clinical trial in the fourth quarter of 2017.

- XEN901 is a potent, selective Nav1.6 sodium channel inhibitor for the treatment of rare infantile epileptic encephalopathies and other forms of epilepsy. XEN901 has demonstrated efficacy against seizures in an animal model of Nav1.6 gain-of-function SCN8A epilepsy as well as models that support the treatment of adult partial onset epilepsy. Xenon expects to file an IND, or IND equivalent, application in the fourth quarter of 2017.

Partnered Programs

- TV-45070 is a topical sodium channel inhibitor being developed in collaboration with Xenon’s partner, Teva Pharmaceutical Industries Ltd., for the treatment of neuropathic pain. Teva is currently conducting a randomized, double-blind, placebo-controlled Phase 2b clinical trial of TV-45070 in patients with post-herpetic neuralgia. Enrollment is complete with topline results expected in mid-2017.
- Xenon's collaborator Genentech, a member of the Roche Group, has completed a Phase 1 clinical trial for GDC-0310, which is an oral, selective Nav1.7 small-molecule inhibitor. Pending a full assessment of the Phase 1 clinical results and ongoing *in vivo* studies, Genentech anticipates initiating a Phase 2 clinical trial in 2017 for the potential treatment of pain.

First Quarter 2017 Financial Results

Cash and cash equivalents and marketable securities as of March 31, 2017 were $58.0 million, compared to $64.1 million as of December 31, 2016. There were 17,996,680 common shares outstanding as of March 31, 2017.

For the quarter ended March 31, 2017, Xenon reported total revenue of $0.02 million, compared to $0.6 million for the same period in 2016. The decrease of $0.6 million was primarily attributable to revenue recognized related to the upfront payment from the March 2014 genetics collaborative agreement with Genentech which was fully recognized by March 2016. The remaining decrease was due to less full time equivalent funding from collaborative partners as resources were shifted from supporting collaborations to Xenon's proprietary programs.

Research and development expenses for the quarter ended March 31, 2017 were $5.9 million, compared to $4.4 million for the same period in 2016. The increase of $1.5 million was primarily attributable to increased spending on XEN801 and XEN901 product candidates as well as internal preclinical and discovery programs, partially offset by a decrease in collaboration expenses.

General and administrative expenses for the quarter ended March 31, 2017 were $2.1 million, compared to $1.9 million for the same period in 2016. The increase of $0.2 million was primarily attributable to increased costs for business development and salaries and benefits, partially offset by the fair value adjustment on liability classified stock options.

Other income for the quarter ended March 31, 2017 was $0.5 million, compared to $2.4 million for the same period in 2016. The decrease of $1.9 million was primarily driven by a decrease in unrealized foreign exchange gains arising from the translation of Canadian denominated balances to U.S. dollars.

Net loss for the quarter ended March 31, 2017 was $7.5 million, compared to $3.3 million for the same period in 2016. The change was primarily attributable to lower revenue, higher research and development and general and administrative expenses and lower unrealized foreign exchange gains.

Conference Call Information

Xenon will host a conference call and live audio webcast today at 4:30 p.m. Eastern Time (1:30 p.m. Pacific Time) to discuss its first quarter 2017 financial results and to provide a business update. To participate in the call, please dial (855) 779-9075, or (631) 485-4866 for international callers, and provide conference ID number 19520816. The webcast will be broadcast live on the "Investors" section of Xenon's website at www.xenon-pharma.com and will be available for replay following the call for 30 days.

About Xenon Pharmaceuticals Inc.

Xenon is a clinical stage biopharmaceutical company focused on developing innovative therapeutics to improve the lives of patients with neurological disorders. Building upon our extensive knowledge of human genetics and diseases caused by mutations in ion channels, known as channelopathies, we are advancing – both independently and with our pharmaceutical collaborators – a novel product pipeline of ion channel modulators to address therapeutic areas of high unmet medical need, such as pain and epilepsy. For more information, please visit www.xenon-pharma.com.

Safe Harbor Statement

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995 and Canadian securities laws. These forward-looking statements are not based on historical fact, and include statements regarding our ability to achieve milestones in both our proprietary and partnered development programs, the anticipated read out of topline results from the Phase 2b clinical trial of TV-45070, the anticipated timing of IND or IND equivalent submissions with regulatory agencies, the initiation of future clinical trials, the timing of and results from our and our collaborators' ongoing clinical trials and pre-clinical development activities, the plans of our collaboration partners and their interactions with regulatory agencies, the potential efficacy, future development plans and commercial potential of our and our collaborators' product candidates and the progress and potential of ongoing development programs. These forward-looking statements are based on current assumptions that involve risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from those expressed or implied by such forward-looking statements. These risks and uncertainties, many of which are beyond our control, include, but are not limited to: clinical trials may not demonstrate safety and efficacy of any of our or our collaborators' product candidates; our discovery platform or ongoing collaborations may not yield additional product candidates; any of our or our collaborators' product candidates may fail in development, may not receive required regulatory approvals, or may be delayed to a point where they are not commercially viable; we may not achieve additional milestones pursuant to our collaboration agreements; the impact of competition; the impact of expanded product development and clinical activities on operating expenses; adverse conditions in the general domestic and global economic markets; as well as the other risks identified in our filings with the Securities and Exchange Commission and the securities commissions in British Columbia, Alberta and Ontario. These forward-looking statements speak only as of the date hereof and we assume no obligation to update these forward-looking statements, and readers are cautioned not to place undue reliance on such forward-looking statements.

"Xenon" and the Xenon logo are registered trademarks or trademarks of Xenon Pharmaceuticals Inc. in various jurisdictions. All other trademarks belong to their respective owner.

XENON PHARMACEUTICALS INC.
Condensed Consolidated Balance Sheets
(Expressed in thousands of U.S. dollars)

	March 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents and marketable securities	$ 58,027	$ 64,146
Other current assets	1,114	1,529
Other assets	1,645	1,812
Total assets	$ 60,786	$ 67,487
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	3,591	3,586
Total liabilities	$ 3,591	$ 3,586
Shareholders' equity	$ 57,195	$ 63,901
Total liabilities and shareholders' equity	$ 60,786	$ 67,487

XENON PHARMACEUTICALS INC.
Condensed Consolidated Statements of Operations
(Expressed in thousands of U.S. dollars except share and per share amounts)

	Three Months Ended March 31,	
	2017	2016
Revenue:		
Collaboration revenue	$ 15	$ 569
Royalties	1	32
	16	601
Operating expenses:		
Research and development	5,903	4,364
General and administrative	2,100	1,895
Total operating expenses	8,003	6,259
Loss from operations	(7,987)	(5,658)
Other income	470	2,395
Net loss	(7,517)	(3,263)
Net loss per common share:		
Basic	$ (0.42)	$ (0.23)
Diluted	$ (0.43)	$ (0.23)
Weighted-average common shares outstanding:		
Basic	17,946,209	14,394,000
Diluted	17,974,469	14,394,000

Investor/Media Contact:
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