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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

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**FORM 8-K**

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**CURRENT REPORT**

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

**Date of Report (Date of earliest event reported): August 3, 2017**

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**XENON PHARMACEUTICALS INC.**

(Exact name of Registrant as Specified in Its Charter)

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**Canada**

(State or Other Jurisdiction  
of Incorporation)

**001-36687**

(Commission File Number)

**98-0661854**

(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)

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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.

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**Item 2.02 Results of Operations and Financial Condition**

On August 3, 2017, Xenon Pharmaceuticals Inc. (the “Company”) announced via press release the Company’s financial results for the six month period ended June 30, 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:

<b><u>Exhibit Number</u></b>	<b><u>Description</u></b>
99.1	Press Release issued by Xenon Pharmaceuticals Inc. dated August 3, 2017.

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**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: August 3, 2017

By: \_\_\_\_\_ */s/ Ian Mortimer*  
**Ian Mortimer**  
**Chief Financial Officer & Chief Operating Officer**

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## EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
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99.1

Press Release issued by Xenon Pharmaceuticals Inc. dated August 3, 2017.

## NEWS RELEASE

**Xenon Pharmaceuticals Reports Second Quarter 2017 Financial Results and Provides Corporate Update**

BURNABY, British Columbia, August 3, 2017 -- Xenon Pharmaceuticals Inc. (Nasdaq:XENE), a clinical-stage biopharmaceutical company, today reported its financial results for the quarter ended June 30, 2017, and provided a corporate update for 2017.

Dr. Simon Pimstone, Xenon's President and Chief Executive Officer, said, "We remain focused on our strategy to develop ion channel modulators, backed by strong human genetic validation, for neurological disorders. Both of our proprietary programs, XEN1101 and XEN901, are highly differentiated molecules being developed as anti-epileptic drugs. We have also partnered with collaborators at Genentech to advance a novel, selective oral Nav1.7 inhibitor for the treatment of pain."

Dr. Pimstone added, "With a healthy balance sheet, we are positioned to fully support these key clinical programs and look forward to a number of important events in the coming months. We anticipate that XEN1101, a Kv7 potassium channel opener, 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, a selective Nav1.6 inhibitor, in the fourth quarter of this year. We also anticipate Genentech will advance GDC-0310 into a Phase 2 clinical trial in the first quarter of 2018."

**Second Quarter 2017 Highlights and Anticipated Milestones**

- 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, and Phase 2 development is anticipated to begin by mid-2018.
  - 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 animal 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.
  - TV-45070 is a topical, small-molecule inhibitor of the sodium channel Nav1.7, and other sodium channels, expressed in the pain-sensing peripheral nervous system. In June 2017, Xenon, along with its collaborator, Teva Pharmaceutical Industries Ltd., announced topline results from a Phase 2b clinical trial that evaluated the efficacy and safety of TV-45070 in patients with post-herpetic neuralgia. TV-45070 did not meet the primary endpoint of a statistically significant change in pain from baseline to week four as assessed by the numeric rating scale (NRS), and secondary endpoints were also not met. There were no safety concerns in the study. The companies plan to further analyze the data from this study to determine the next steps for TV-45070.
  - 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 completion and assessment of ongoing preclinical studies, Genentech anticipates initiating a Phase 2 clinical trial for the potential treatment of pain in the first quarter of 2018.
  - In July 2017, Xenon achieved a milestone in its pain genetics discovery collaboration with Genentech triggering a milestone payment. Xenon and Genentech have successfully discovered and identified a novel pain target by leveraging Xenon's Extreme Genetics platform based on the study of rare phenotypes of individuals who have either an inability to perceive pain or have non-precipitated spontaneous severe pain.
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## Second Quarter 2017 Financial Results

Cash and cash equivalents and marketable securities as of June 30, 2017 were \$51.7 million, compared to \$64.1 million as of December 31, 2016. There were 17,998,420 common shares outstanding as of June 30, 2017. Based on current assumptions, which include fully supporting the planned clinical development of XEN1101 and XEN901, Xenon anticipates having sufficient cash to fund operations into the first quarter of 2019, excluding any revenue generated from existing partnerships or potential new partnering arrangements.

For the quarter ended June 30, 2017, Xenon reported total revenue of \$0.02 million, compared to \$0.4 million for the same period in 2016. The decrease 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 June 30, 2017 were \$6.1 million, compared to \$5.1 million for the same period in 2016. The increase of \$1.0 million was primarily attributable to increased spending on internal preclinical and discovery programs, including XEN901 and XEN1101 which was acquired in April 2017, partially offset by a decrease in XEN801 expenses, a product candidate which is no longer being developed, and a decrease in collaboration expenses.

General and administrative expenses for the quarter ended June 30, 2017 were \$1.8 million, compared to \$1.7 million for the same period in 2016. The increase of \$0.1 million was primarily attributable to increased costs for business development activities and salaries and benefits, partially offset by the fair value adjustment on liability classified stock options.

Other income for the quarter ended June 30, 2017 was \$0.5 million, compared to \$0.4 million for the same period in 2016. The increase was primarily driven by an increase in unrealized foreign exchange gains arising from the translation of Canadian denominated balances to U.S. dollars.

Net loss for the quarter ended June 30, 2017 was \$7.4 million, compared to \$6.0 million for the same period in 2016. The change was primarily attributable to lower revenue, higher research and development and general and administrative expenses, partially offset by higher 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 second 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 61781203. The webcast will be broadcast live on the "Investors" section of Xenon's website at [www.xenon-pharma.com](http://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](http://www.xenon-pharma.com).

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## **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, our expectations regarding the sufficiency of our cash to fund operations into the first quarter of 2019, 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 assumptions regarding our planned expenditures and sufficiency of our cash to fund operations may be incorrect; 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,” “Extreme Genetics” and the Xenon logo are registered trademarks or trademarks of Xenon Pharmaceuticals Inc. in various jurisdictions. All other trademarks belong to their respective owner.

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

	June 30, 2017	December 31, 2016
<b>Assets</b>		
Current assets:		
Cash and cash equivalents and marketable securities	\$ 51,696	\$ 64,146
Other current assets	937	1,529
Other assets	1,593	1,812
<b>Total assets</b>	<b>\$ 54,226</b>	<b>\$ 67,487</b>
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	3,774	3,586
<b>Total liabilities</b>	<b>\$ 3,774</b>	<b>\$ 3,586</b>
<b>Shareholders' equity</b>	<b>\$ 50,452</b>	<b>\$ 63,901</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 54,226</b>	<b>\$ 67,487</b>

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
<b>Revenue:</b>				
Collaboration revenue	\$ 15	\$ 412	\$ 30	\$ 981
Royalties	—	1	1	33
	15	413	31	1,014
<b>Operating expenses:</b>				
Research and development	6,109	5,103	12,012	9,467
General and administrative	1,799	1,676	3,899	3,571
Total operating expenses	7,908	6,779	15,911	13,038
Loss from operations	(7,893)	(6,366)	(15,880)	(12,024)
Other income	513	350	983	2,745
<b>Net loss</b>	<b>(7,380)</b>	<b>(6,016)</b>	<b>(14,897)</b>	<b>(9,279)</b>
<b>Net loss per common share:</b>				
Basic	\$ (0.41)	\$ (0.42)	\$ (0.83)	\$ (0.64)
Diluted	\$ (0.41)	\$ (0.42)	\$ (0.84)	\$ (0.65)
<b>Weighted-average common shares outstanding:</b>				
Basic	17,997,194	14,408,108	17,971,702	14,401,054
Diluted	18,015,748	14,434,602	17,995,109	14,428,160

**Investor/Media Contact:**

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