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): **March 27, 2017**

PhaseRx, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**001-37772**	**20-4690620**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

410 W. Harrison Street, Suite 300 **Seattle, Washington** (Address of principal executive offices)	**98119** (Zip Code)

Registrant's telephone number, including area code: **(206) 805-6300**

(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:

- ☐ 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))

Item 2.02. Results of Operations and Financial Condition.

On March 27, 2017, PhaseRx, Inc. issued a press release announcing its financial results for the year and fourth quarter ended December 31, 2016. A copy of this press release is furnished as Exhibit 99.1 hereto and is incorporated herein by reference.

In accordance with General Instruction B.2 of Form 8-K, the information in this Current Report on Form 8-K (including Exhibit 99.1) is being furnished pursuant to Item 2.02 and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise be subject to the liabilities of that section, and such information shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof and regardless of any general incorporation language in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits .

Exhibit No.	Description
99.1	Press release, dated March 27, 2017

SIGNATURE

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.

PhaseRx, Inc.

Date: March 27, 2017

By: /s/ Robert W. Overell

Robert W. Overell, Ph.D.
Chief Executive Officer

Exhibit 99.1

PhaseRx Reports Fourth Quarter and Full Year 2016 Financial Results and Provides Corporate Update

SEATTLE, March 27, 2017 - PhaseRx, Inc. (NASDAQ: PZRX), a biopharmaceutical company developing mRNA treatments for life-threatening inherited liver diseases in children, today reported financial results for the fourth quarter and full year ended December 31, 2016 and provided an update on its corporate activities.

"PhaseRx continued to make progress during the fourth quarter of 2016 through the announcement of positive results from our non-human primate safety study, and with our lead development candidate, PRX-OTC, receiving orphan drug designation by the FDA," said Robert W. Overell, Ph.D., president and chief executive officer." In 2017, we anticipate completing our GLP toxicology and GMP manufacturing activities and submitting an IND for PRX-OTC in the fourth quarter. I look forward to updating investors on our progress with PRX-OTC and other programs as the year unfolds."

Full Year 2016 and Subsequent Highlights

- On February 8, 2017, PhaseRx announced a poster presentation for its lead product candidate, PRX-OTC, at the 13th Annual WORLDSymposium™ 2017 that took place February 13-17, 2017. PRX-OTC is in development for the treatment of Ornithine Transcarbamylase Deficiency (OTCD).

- On November 28, 2016, the company announced that its lead candidate, PRX-OTC, which is being developed for the treatment of OTCD, received orphan drug designation by the U.S. Food and Drug Administration (FDA).

- On November 8, 2016, PhaseRx announced positive results from the company's single escalating dose response study in non-human primates. The administration of mRNA delivered using the company's proprietary Hybrid mRNA Technology ™ platform in a large animal model was safe and well tolerated at all dose levels tested.

- On October 25, 2016, the company presented data evaluating its mRNA Hybrid Technology platform at the 4th International mRNA Health Conference in Boston. The poster, titled, 'Targeted mRNA delivery to the liver for Intracellular Enyzme Replacement Therapy (i-ERT)' was presented by Pierrot Harvie, Ph.D., Associate Director of Formulations at PhaseRx.

- On July 11, 2016, PhaseRx announced the presentation of data evaluating its mRNA Hybrid Technology TM platform at the 43rd Annual Meeting & Exposition of the Controlled Release Society (CRS) that took place July 17-20, 2016, in Seattle. The presentation was titled "Targeted mRNA Delivery to the Liver for Intracellular Enzyme Replacement Therapy (i-ERT)."

- On June 21, 2016, the company announced product pipeline advancements including the selection of its lead product candidate, PRX-OTC, for treatment of OTCD, and positive proof-of-concept data for a second product candidate, PRX-ASL, for treatment of Argininosuccinate Lyase Deficiency (ASLD).

- On June 7, 2016, PhaseRx entered into a loan and security agreement with Hercules Capital, Inc., pursuant to which it received $6 million.

- On May 23, 2016, the company closed its initial public offering of 3,700,000 shares of common stock at a price of $5.00 per share for aggregate gross proceeds of $18.5 million.

Financial Results for the Three Months and Year Ended December 31, 2016

Total operating expenses for the fourth quarter of 2016 were $3.3 million, compared to $1.7 million of operating expenses in 2015. Total operating expenses for the year ended December 31, 2016 were $18.3 million compared to $6.2 million for 2015. The increase in operating expenses in the fourth quarter of 2016 was primarily due to increased research and development costs to execute PhaseRx's product development plan of its lead drug candidate PRX-OTC, increased costs associated with being a publicly-traded company and an increase in non-cash stock-based compensation expenses. The operating expenses for the year ended December 31, 2016 included non-recurring, non-cash financial advising fees of $7.5 million related to the company's IPO.

The net loss for the quarter ended December 31, 2016 was $3.5 million, or $0.30 per share, compared to a net loss of $2.3 million, or $4.25 per share, for the quarter ended December 31, 2015. The net loss for the year ended December 31, 2016 was $20.1 million, or $2.68 per share, compared to $7.4 million, or $14.22 per share for 2015.

As of December 31, 2016, the company had cash, cash equivalents, and marketable securities of $15.5 million. The company believes it has sufficient cash to fund its operations for at least the next 12 months.

About PhaseRx

PhaseRx is a biopharmaceutical company dedicated to developing mRNA products for the treatment of children with inherited enzyme deficiencies in the liver using intracellular enzyme replacement therapy (i-ERT). PhaseRx's initial product development focus is on urea cycle disorders, a group of rare genetic diseases that generally present before the age of twelve and are characterized by the body's inability to remove ammonia from the blood with potentially devastating consequences for patients. The company's i-ERT approach is enabled by its proprietary Hybrid mRNA Technology™ platform. PhaseRx is headquartered in Seattle. For more information, please visit www.phaserx.com.

Safe Harbor Statement

This press release contains "forward-looking statements." Such statements may be preceded by the words "intends," "may," "will," "plans," "expects," "anticipates," "projects," "predicts," "estimates," "aims," "believes," "hopes," "potential" or similar words. Forward-looking statements are not guarantees of future performance, are based on certain assumptions and are subject to various known and unknown risks and uncertainties, many of which are beyond the company's control, and cannot be predicted or quantified and consequently, actual results may differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, without limitation, risks and uncertainties associated with (i) the fact that the company has incurred significant losses since its inception and anticipates that it will continue to incur significant losses for the foreseeable future, (ii) the company being dependent on technologies it has licensed and that it may need to license in the future, (iii) the fact that the company will need to raise substantial additional funding to develop its planned products, (iv) the fact that the company’s Hybrid mRNA Technology has not previously been tested beyond company preclinical studies, and that mRNA-based drug development is unproven, (v) the fact that all of the company’s programs are in preclinical studies or early stage research and it is uncertain that any company product candidates will receive regulatory approval or be commercialized, (vi) the fact that development of the company’s product candidates will be expensive, time-consuming and subject to regulatory approval, (vii) the company expecting to continue to incur significant research and development expenses, (viii) the company becoming dependent on collaborative arrangements for the development and commercialization of its products, (ix) the company’s ability to adequately protect its proprietary technology from legal challenges, infringement or alternative technologies and (x) the biotechnology and pharmaceutical industries being intensely competitive. More detailed information about the company and the risk factors that may affect the realization of forward looking statements is set forth in the company's filings with the Securities and Exchange Commission (SEC), including the most recent annual report on Form 10-K and its quarterly reports on Form 10-Q. Investors and security holders are urged to read these documents free of charge on the SEC's web site at http://www.sec.gov. The company assumes no obligation to publicly update or revise its forward-looking statements as a result of new information, future events or otherwise.

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PhaseRx, Inc.
Statements of Operations and Balance Sheet Data
(in thousands, except per share amounts)

Statements of Operations	**Three Months Ended December 31, 2016**	**Three Months Ended December 31, 2015**	**Year Ended December 31, 2016**	**Year Ended December 31, 2015**
	(Unaudited)			
Revenue	$ -	$ -	$ -	$ 375
Operating expenses				
Research and development	2,025	1,268	6,662	4,883
General and administrative	1,243	412	4,153	1,299
Noncash financial advising fees	-	-	7,515	-
Total operating expenses	3,268	1,680	18,330	6,182
Loss from operations	(3,268)	(1,680)	(18,330)	(5,807)
Interest income	27	-	61	-
Interest expense	(236)	(599)	(2,058)	(1,649)
Other income, net	-	18	190	79
Total other income (expense)	(209)	(581)	(1,807)	(1,570)
Net loss	$ (3,477)	$ (2,261)	$ (20,137)	$ (7,377)
Basic and diluted net loss per share	$ (0.30)	$ (4.25)	$ (2.68)	$ (14.22)
Shares used in computation of basic and diluted net loss per share	11,690	532	7,524	519

Balance Sheet Data:	December 31, 2016	December 31, 2015
Cash and cash equivalents	$ 9,983	$ 3,290
Marketable securities	5,496	-
Total assets	16,448	3,914
Accrued interest	49	3,199
Current portion of term loan payable	576	-
Convertible notes, net of debt discount	-	19,841
Preferred stock warrant liability	-	3,163
Term loan payable, net of debt discount and current portion	5,127	-
Redeemable convertible preferred stock	-	25,712
Total stockholders' equity (deficit)	9,297	(48,889)