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): November 8, 2017

RXi PHARMACEUTICALS CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**001-36304**	**45-3215903**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

257 Simarano Drive, Suite 101
Marlborough, Massachusetts 01752
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (508) 767-3861

Indicate by check mark whether the registrant is an emerging growth company as defined in 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. ☒

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))

Item 2.02 Results of Operations and Financial Condition.

On November 8, 2017, RXi Pharmaceuticals Corporation reported its results of operations for the quarter ended September 30, 2017. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K (the "Report").

The information in this Item 2.02 and attached as Exhibit 99.1 to this Report will not be treated as "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section. This information will not be incorporated by reference into any filing under the Securities Act of 1933, as amended, or into another filing under the Exchange Act, unless that filing expressly incorporates this information by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

99.1 Press Release dated November 8, 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.

RXi PHARMACEUTICALS CORPORATION

Date: November 8, 2017

By: /s/ Geert Cauwenbergh
Geert Cauwenbergh, Dr. Med. Sc.
Chief Executive Officer

Exhibit 99.1

RXi Pharmaceuticals Reports Third Quarter 2017 Financial Results and Recent Corporate Highlights

MARLBOROUGH, Mass., November 8, 2017 /PRNewswire/ – RXi Pharmaceuticals Corporation (NASDAQ: RXII), a clinical-stage RNAi company developing innovative therapeutics that address significant unmet medical needs, today reported its financial results for the third quarter ended September 30, 2017, and provided a business update.

"RXi maintained a conservative spend rate in the third quarter in line with its projected budget as it continues to execute on its strategy with anticipated readouts this quarter from our dermatology and ophthalmology clinical programs. Data collection and analysis is ongoing, and the release of data is on track as previously reported," said Dr. Geert Cauwenbergh, President and CEO of RXi Pharmaceuticals. He further added that, "Our team has made notable progress with research efforts and data generation using our proprietary self-delivering RNAi technology platform (sd-rxRNA) for use in cancer therapeutics. sd-rxRNA compounds demonstrate high transfection efficiency with high cell viability in a number of immune cells. We believe that these assets have the potential to become a foundation for future growth opportunities, including several therapeutic approaches in the rapidly growing field of cell therapy for oncology. We look forward to successful and meaningful growth through our work as well as partnerships in this exciting and highly valuable medical field."

A live audio webcast will begin today at 4:30 p.m. ET. The webcast link is available under the "Investors – Events and Presentations" section of the Company's website, www.rxipharma.com. The event may also be accessed by dialing toll-free in the United States: +1 (844) 376-4678. International participants may access the event by dialing: +1 (209) 905-5958. An archive of the webcast will be available on the company's website approximately two hours after the presentation.

Select Third Quarter 2017 Financial Highlights

Cash Position

At September 30, 2017, the Company had cash of $5.4 million, compared with $12.9 million at December 31, 2016.

On August 8, 2017, the Company entered into a purchase agreement with Lincoln Park Capital Fund, LLC ("LPC"), pursuant to which the Company has the right to sell to LPC up to $15 million in shares of the Company's common stock over the 30-month term of the agreement. We expect to use proceeds from the purchase agreement for general corporate purposes, including but not limited to the advancement of our immunotherapy program, our clinical trials, and general and administrative expenses. As of September 30, 2017, there have been no purchases under the agreement with LPC.

Research and Development Expenses

Research and development expenses for the quarter ended September 30, 2017 were $1.5 million, as compared with $1.5 million for the quarter ended September 30, 2016. Research and development expenses were consistent quarter over quarter, with slight increases due to subject fees for the second cohort in the Samcyprone™ Phase 2 clinical trial and preclinical work in the Company's new immunotherapy program that was integrated into the Company with the acquisition of MirImmune in the first quarter of 2017, which were offset by a decrease in stock-based compensation expense.

General and Administrative Expenses

General and administrative expenses for the quarter ended September 30, 2017 were $1.0 million, as compared with $0.8 million for the quarter ended September 30, 2016. The increase in general and administrative expenses was primarily due to payroll-related expenses, including severance benefits, with the hire of the Company's former chief business officer in connection with the acquisition of MirImmune, resulting in a higher employee headcount as compared to the same period of the prior year, offset by a decrease in stock-based compensation expense.

Net Loss

Net loss for the three months ended September 30, 2017 was $2.5 million, compared with $2.2 million for the three months ended September 30, 2016. The increase in net loss was primarily driven by the changes in general and administrative expenses, as discussed above.

Nasdaq Compliance

On August 2, 2017, the NASDAQ Stock Market provided written notice and granted the Company an additional 180 calendar days to regain compliance with the minimum bid price requirements set forth in the NASDAQ listing rules. As a result of this extension, the Company has until January 29, 2018 to regain compliance by maintaining a closing bid price of at least $1.00 for 10 consecutive business days. The NASDAQ written notice has no effect on the listing of the Company's common stock at this time.

Select Third Quarter 2017 and Recent Corporate Highlights

Select Business and Corporate Highlights

sd-rxRNA: Broadly applicable to numerous development areas providing continued and expanded growth

Grant Award – Development of self-delivering RNAi targeted to PTEN for treatment of spinal cord injury

The Company's proprietary self-delivering platform (sd-rxRNA) is broadly applicable to numerous therapeutic areas. For example, BioAxone Biosciences was recently awarded a grant from the National Institute of Neurological Disorders and Stroke (NINDS), part of the agency's SBIR Phase II funding program, to fund further development of BioAxone's preclinical candidate BA-434 in collaboration with RXi Pharmaceuticals. This two-year grant provides funding for further development of BA-434, a novel sd-rxRNA compound that targets PTEN for the treatment of spinal cord injury.

BioAxone has been awarded a total of $1,794,895 to fund the collaborative project over 24 months. For their contribution, RXi will receive approximately $129,000 in the first year with the potential to receive an additional $118,800 in the second year after achieving certain milestones.

Cell Therapy for Oncology

The Company's ongoing research programs with its sd-rxRNA platform have demonstrated robust cellular uptake in a number of immune cell types including, human T-cells, meso CAR-T, human NK, and dendritic cells. Our internal preclinical programs are focused on development of sd-rxRNA compounds for optimizing existing cell-based therapy treatment paradigms in oncology. In addition, the Company is actively seeking partnerships and collaborations with industry and academia to develop new technologies using engineered cells and our sd-rxRNA compounds. Our scientific team and advisors provide a strong foundation for the development of novel therapeutic treatment approaches using sd-rxRNA. This support positions RXi well with opportunities to provide meaningful growth for the Company.

Direct Therapeutic Use

RXI-109-1402 – Hypertrophic Scarring

The Company's ongoing Phase 2 clinical trial, RXI-109-1402, is being conducted to evaluate RXI-109, a sd-rxRNA compound targeting connective tissue growth factor (CTGF), a key regulator of scar formation. This open-label, multi-center study is designed to evaluate the effectiveness and safety of RXI-109 to reduce scar formation in healthy volunteers post scar revision surgery. The Company expects to share final study outcomes before the end of this year.

RXI-109-1501 – Retinal Scarring in Advanced Age-related Macular Degeneration (AMD)

Enrollment is complete in this Phase 1/2 study evaluating the safety and clinical activity of RXI-109 to prevent the progression of retinal scarring, a harmful component of numerous retinal diseases. This study is a multi-dose, dose escalation trial conducted in patients with advanced neovascular or wet age-related macular degeneration (AMD) where retinal scarring can result in continued vision loss. The primary endpoint for RXI-109-1501 is to evaluate the safety and tolerability of RXI-109. Additional endpoints will assess RXI-109's potential for clinical activity using numerous assessments to monitor ocular health and visual acuity. The Company expects to complete subject participation in the study by the end of 2017 and share top-line data in early 2018.

RXI-SCP-1502 – Treatment of Cutaneous Warts

Samcyprone™, a proprietary topical formulation of the small molecule diphenylcyclopropenone (DPCP), is being evaluated in a Phase 2a clinical trial. RXI-SCP-1502 is a multi-center, multi-dose trial conducted in subjects with at least one cutaneous, plantar or periungual wart. The Company expects to share early read-outs before the end of this year.

Direct Consumer Care Use

RXI-231 – Consumer Care Products

The Company initiated a consumer testing program with RXI-231, a cosmetic ingredient based on sd-rxRNA that targets tyrosinase (TYR). The cosmetic product is a gel formulation designed to aid in the reduction of pigmentation and thereby improving skin appearance. The consumer testing program will evaluate the use and consumer acceptability of RXI-231.

There are three studies under this program. The first two studies in volunteers are performed to determine irritation and sensitization potential of the gel product containing RXI-231 when applied to the skin. A third study investigates the potential of the product to improve the appearance of skin pigmentation induced by UV exposure. The Company projects to report results before the end of this year.

Corporate Update

Management Team

On September 15, 2017, the Company announced the departure of Dr. Alexey Eliseev, former CEO of MirImmune Inc. Dr. Eliseev joined RXi on January 6, 2017 as Chief Business Officer of the Company in connection with its acquisition of MirImmune. MirImmune was a privately-held company developing cell-based therapeutics for cancer treatments based on a license to RXi's proprietary self-delivering RNAi technology. In his role as Chief Business Officer of RXi, Dr. Eliseev was responsible for the integration of this new therapeutic approach into the activities of RXi Pharmaceuticals, and for introducing the Company to several key industry and academic groups active in this emerging field.

Dr. James Cardia, RXi's current Director of Business Development and Intellectual Property now leads the management of the various ongoing activities in partnering and business development. During his tenure at RXi, Dr. Cardia's group was responsible for the discovery and optimization of "self-delivering" rxRNAs (sd-rxRNAs®) as well as the development and characterization of RXI-109, a promising anti-fibrotic agent currently in clinical trials for the treatment of both dermal and retinal scarring.

About RXi Pharmaceuticals Corporation

RXi Pharmaceuticals Corporation (NASDAQ: RXII) is a clinical-stage company developing innovative therapeutics that address significant unmet medical needs. Building on the pioneering discovery of RNAi, scientists at RXi have harnessed the naturally occurring RNAi process which can be used to "silence" or down-regulate the expression of a specific gene that may be overexpressed in a disease condition. RXi developed a robust RNAi therapeutic platform including self-delivering RNA (sd-rxRNA®) compounds, that have the ability to selectively block the expression of any target in the genome, thus providing applicability to many therapeutic areas. Our current programs include dermatology, ophthalmology and cell-based cancer immunotherapy. RXi's extensive patent portfolio provides for multiple product and business development opportunities across a broad spectrum of therapeutic areas and we actively pursue research collaborations, partnering and out-licensing opportunities with academia and pharmaceutical companies. For additional information, visit the Company's website, www.rxipharma.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about: our ability to successfully develop RXI-109, Samcyprone™ and our other product candidates (collectively, "our product candidates"); the future success of our clinical trials with our product candidates; the timing for the commencement and completion of clinical trials; our ability to enter into strategic partnerships and the future success of these strategic partnerships; and our ability to deploy our sd-rxRNA® technology through partnerships, as well as the prospects of these partnerships to provide positive returns. Forward-looking statements about expectations and development plans of RXi's product candidates and partnerships involve significant risks and uncertainties, including the following: risks that we may not be able to successfully develop and commercialize our product candidates; risks that product development and clinical studies may be delayed, not proceed as planned and/or be subject to significant cost over-runs; risks related to the development and commercialization of products by competitors; risks related to our ability to control the timing and terms of collaborations with third parties; and risks that other companies or organizations may assert patent rights preventing us from developing or commercializing our product candidates. Additional risks are detailed in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q under the caption "Risk Factors." Readers are urged to review these risk factors and to not act in reliance on any forward-looking statements, as actual results may differ from those contemplated by our forward-looking statements. RXi does not undertake to update forward-looking statements to reflect a change in its views, events or circumstances that occur after the date of this release.

Contact

RXi Pharmaceuticals Corporation
Tamara McGrillen
508-929-3646
tmcgrillen@rxipharma.com

RXi PHARMACEUTICALS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except share and per share data)
(Unaudited)

	For the Three Months Ended September 30, 2017	For the Three Months Ended September 30, 2016	For the Nine Months Ended September 30, 2017	For the Nine Months Ended September 30, 2016
Net revenues	$ —	$ —	$ —	$ 19
Operating expenses:				
Research and development	1,490	1,464	4,166	4,108
Acquired in-process research and development	—	—	3,075	—
General and administrative	986	752	3,209	2,587
Total operating expenses	2,476	2,216	10,450	6,695
Operating loss	(2,476)	(2,216)	(10,450)	(6,676)
Total other income	—	4	—	21
Net loss	$ (2,476)	$ (2,212)	$ (10,450)	$ (6,655)
Net loss per common share:				
Basic and diluted loss per share	$ (0.11)	$ (0.34)	$ (0.47)	$ (1.02)
Weighted average common shares:				
Basic and diluted	23,511,444	6,576,096	22,167,753	6,548,696

RXi PHARMACEUTICALS CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Amounts in thousands)
(Unaudited)

	September 30, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$ 5,416	$ 12,906
Restricted cash	50	50
Prepaid expenses	271	150
Total current assets	5,737	13,106
Property and equipment, net	269	114
Notes receivable	—	150
Other assets	27	27
Total assets	$ 6,033	$ 13,397
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 702	$ 917
Accrued expenses	1,901	1,625
Total current liabilities	2,603	2,542
Total stockholders' equity	3,430	10,855
Total liabilities and stockholders' equity	$ 6,033	$ 13,397