

**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 13, 2015**

**Mirna Therapeutics, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**001-37566**  
(Commission  
File Number)

**26-1824804**  
(IRS Employer  
Identification Number)

**2150 Woodward Street, Suite 100**  
**Austin, TX 78744**  
(Address of principal executive offices, including Zip Code)

Registrant's telephone number, including area code: **(512) 901-0900**

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 November 13, 2015, Mirna Therapeutics, Inc. ("Mirna" or the "Company") issued a press release relating to its financial results for the three and nine months ended September 30, 2015. The full text of the press release is furnished herewith as Exhibit 99.1.

The information in this Item 2.02 of this Form 8-K and the Exhibit 99.1 attached hereto shall not be deemed "filed" for 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, or incorporated by reference in any filing under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

**Item 9.01 Financial Statements and Exhibits.**

<b>Exhibit No.</b>	<b>Description</b>
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99.1	Press release dated November 13, 2015.
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**SIGNATURES**

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

**MIRNA THERAPEUTICS, INC.**

Date: November 13, 2015

By: /s/ Alan Fuhrman  
Alan Fuhrman  
Chief Financial Officer



## Mirna Therapeutics Reports Third Quarter Financial Results and Recent Highlights

- Demonstrated confirmed partial responses in liver cancer and melanoma in Phase 1 clinical trial of lead product candidate MRX34
- Completed IPO and concurrent private placement in October with aggregate gross proceeds of \$65.5 million
- Strengthened management team with two key hires

**AUSTIN, Texas—November 13, 2015**—Mirna Therapeutics, Inc. (Nasdaq: MIRN), a clinical-stage biopharmaceutical company developing a broad pipeline of microRNA-based oncology therapeutics, today reported financial results and recent highlights for the three and nine months ended September 30, 2015.

“I’m pleased to report that Mirna made significant clinical and operational progress in the quarter,” said President and CEO Paul Lammers, M.D., M.Sc. “We continued to advance the Phase 1 clinical trial of our lead product candidate MRX34, the first microRNA mimic to enter clinical development. Interim data from this study have shown effects on biological targets of miR-34 as well as clinical benefits in various solid cancers, including two confirmed partial responses in patients with Stage IV cancer with metastases. In addition, we have strengthened our leadership team with the addition of our Chief Scientific Officer and Chief Financial Officer, and raised over \$65 million in public and private financings, leaving us well positioned to advance our pipeline of microRNA therapeutics.”

### Program and Corporate Updates

- **Continued to advance Phase 1 trial of lead product candidate MRX34, with two confirmed partial responses.** The Company further advanced its ongoing Phase 1 clinical trial of MRX34, enrolling patients at multiple sites in the U.S. and Korea. As previously disclosed in an analysis conducted in August 2015, interim safety data showed that MRX34 continued to have a manageable safety profile in patients with advanced primary liver cancer (hepatocellular carcinoma), other solid tumors with or without liver metastases, and hematological malignancies. Preliminary biomarker analysis of white blood cells from patients treated with MRX34 in the trial also showed dose-dependent effects on miR-34 target genes suggesting the delivery of miR-34 into human white blood cells and engagement of biological targets of the microRNA (miRNA). Two patients with advanced, metastatic Stage IV cancer had achieved objective clinical responses after treatment with MRX34: one patient with primary liver cancer (hepatocellular carcinoma, HCC) metastatic to the lung, and one patient with acral melanoma, widely metastatic to the abdominal wall, lymph nodes and other areas. Both patients achieved confirmed partial responses per Response Evaluation Criteria in Solid Tumors (RECIST). The Company plans to complete dose-escalation in the study this year, and to enroll additional patients across different tumor-specific expansion cohorts by the end of 2016.
- **Raised over \$65 million:** The Company successfully completed its initial public offering (IPO) in October 2015, raising gross proceeds of \$48.7 million, which reflects the partial exercise of the underwriter’s option to purchase additional shares in the IPO. Concurrent with the IPO, the Company closed a private placement with the Cancer Prevention and Research Institute of Texas for additional gross proceeds of \$16.8 million. For the year to date, the Company raised aggregate proceeds totaling more than \$100 million in public and private financings.
- **Strengthened executive team:** The Company successfully added key senior leadership talent, with the appointments of Miguel Barbosa, Ph.D., to the role of Executive Vice President and Chief Scientific Officer, and Alan Fuhrman to Chief Financial Officer. Dr. Barbosa most recently served as Executive in Residence, Therapeutic Innovation at Johnson & Johnson Innovation, and Mr. Fuhrman most recently served as CFO of Ambit Biosciences.

### **Third Quarter 2015 Financial Results:**

**Cash and cash equivalents** as of September 30, 2015 were approximately \$35.7 million as compared to approximately \$9.3 million as of December 31, 2014. The Company has no debt.

**Research & development expenses** were approximately \$4.7 million for the three months ended September 30, 2015 as compared to \$2.8 million for the same period in 2014. Research and development expenses were approximately \$12.6 million for the nine months ended September 30, 2015, compared to \$7.0 million for the same period in 2014. The increases in the Company’s research and development spending were primarily due to higher clinical trial costs related to the ongoing Phase 1 clinical trial for its lead product candidate MRX34, and increased intellectual property and licensing costs.

**General & administrative expenses** were approximately \$1.6 million for the three months ended September 30, 2015 as compared to approximately \$0.7 million for the same period in 2014. General and administrative costs were approximately \$3.6 million for the nine months ended September 30, 2015 as compared to approximately \$2.5 million for the same period in 2014. The increases in general and administrative expenses were driven primarily by increased personnel costs, including non-cash, stock-based compensation, and higher professional, consulting and recruiting costs. The Company also had a one-time write-off of IPO-related costs totaling \$1.9 million in August 2014.

**Net loss:** Net loss was approximately \$7.8 million, or \$82.16 per common share (basic and diluted), for the three months ended September 30, 2015 as compared to \$6.1 million, or \$73.73 per common share (basic and diluted) for the same period in 2014. The results included non-cash, stock-based compensation charges of approximately \$210,000 in the three months ended September 30, 2015 and approximately \$101,000 in the same period in 2014.

Net loss was approximately \$16.2 million, or \$222.70 per common share (basic and diluted) for the nine months ended September 30, 2015, compared to approximately \$11.5 million loss, or \$303.72 per common share (basic and diluted) for the same period in 2014. The results included non-cash, stock-based compensation charges of approximately \$561,000 in the nine months ended September 30, 2015 and approximately \$287,000 for the same period in 2014.

## About Mirna Therapeutics, Inc.

Mirna is a clinical-stage biopharmaceutical company developing a broad pipeline of microRNA-based oncology therapeutics and is the first to establish clinical proof-of-concept for a microRNA replacement therapy for cancer. Mirna's lead product candidate, MRX34, a mimic of naturally occurring microRNA-34 (miR-34), is currently being studied in a Phase 1 clinical trial in patients with primary liver cancer, advanced solid tumors and hematological malignancies. miR-34 is one of the most widely published microRNAs and is considered a key regulator of multiple oncogenes across key oncogenic pathways, with the capacity to regulate more than 30 different oncogenes and repress the immune checkpoint signaling molecule PD-L1. The potential capacity to simultaneously affect multiple pathways and processes that are critical to cancer cell viability may make mimics of tumor suppressor microRNAs potent anti-cancer agents and less susceptible to drug resistance. Mirna plans to develop MRX34 as a monotherapy and in combination with other therapeutic modalities, such as targeted therapies and immuno-oncology agents. The company was founded in 2007 and is located in Austin, Texas.

For more information, visit [www.mirnax.com](http://www.mirnax.com).

### Cautionary Note on Forward-Looking Statements

*To the extent that statements contained in this press release are not descriptions of historical facts regarding Mirna, they are forward-looking statements reflecting the current beliefs and expectations of management made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements regarding our plans for the continued clinical development of MRX34 and our beliefs regarding our ability to advance our pipeline of microRNA therapeutics. Such forward-looking statements involve substantial risks and uncertainties that could cause our clinical development program, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the uncertainties inherent in the clinical drug development process, including the outcomes of clinical trials, the regulatory approval process, our substantial dependence on MRX34, our commercialization plans and efforts and other matters that could affect the availability or commercial potential of our product candidates. Mirna undertakes no obligation to update or revise any forward-looking statements. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to our business in general, see our Quarterly Report on Form 10-Q that we expect to file with the U.S. Securities and Exchange Commission on or about November 13, 2015. Our results for the quarter ended September 30, 2015 are not necessarily indicative of our operating results for any future periods.*

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### Condensed Consolidated Financial Statements Mirna Therapeutics, Inc. Condensed Consolidated Balance Sheets (in thousands, except share and per share data)

	September 30, 2015 (unaudited)	December 31, 2014
<b>Assets</b>		
<b>Current Assets:</b>		
Cash and cash equivalents	\$ 35,703	\$ 9,319
Grant reimbursement and other receivables	94	155
Prepaid expenses and other current assets	303	143
Total current assets	36,100	9,617
Property and equipment, net	266	116
Deferred offering costs	1,663	92
Other noncurrent assets	57	—
Total assets	\$ 38,086	\$ 9,825
<b>Liabilities, Convertible Preferred Stock and Stockholders' Deficit</b>		
<b>Current Liabilities:</b>		
Accounts payable	\$ 2,236	\$ 871
Accrued expenses	2,749	1,628
Total liabilities	4,985	2,499
Commitments and contingencies (Note 13)		
Convertible preferred stock, \$0.001 par value; 157,650,538 shares authorized at September 30, 2015 (unaudited); 84,000,783 shares authorized at December 31, 2014:		
Series A, Series B, Series B-1, Series C and Series D: 157,650,538 shares designated; 10,159,614 shares issued and outstanding at September 30, 2015 (unaudited) and 5,599,939 shares issued and outstanding at December 31, 2014; aggregate liquidation preference of \$100.8 million at September 30, 2015 (unaudited) and \$55.3 million at December 31, 2014	100,835	55,277
<b>Stockholders' Deficit:</b>		
Common stock, \$0.001 par value; 175,100,000 shares authorized at September 30, 2015 (unaudited) ; 95,000,000 shares authorized at December 31, 2014 ; 111,825 shares issued and outstanding at September 30, 2015 (unaudited); 83,325 shares issued and outstanding at December 31, 2014	—	—
Additional paid in capital	—	—
Accumulated deficit	(67,734)	(47,951)
Total stockholders' deficit	(67,734)	(47,951)
Total liabilities, convertible preferred stock and stockholders' deficit	\$ 38,086	\$ 9,825

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**Mirna Therapeutics, Inc.**  
**Condensed Statements of Operations (Unaudited)**

(in thousands, except share and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
<b>Operating expenses:</b>				
Research and development	\$ 4,683	\$ 2,788	\$ 12,584	\$ 7,035
General and administrative	1,556	715	3,618	2,501
Write-off of offering costs	—	1,920	—	1,920
<b>Total operating expenses</b>	<b>6,239</b>	<b>5,423</b>	<b>16,202</b>	<b>11,456</b>
<b>Other (income) :</b>				
Interest (income)	(8)	—	(8)	—
Total other (income)	(8)	—	(8)	—
<b>Net loss</b>	<b>\$ (6,231)</b>	<b>\$ (5,423)</b>	<b>\$ (16,194)</b>	<b>\$ (11,456)</b>
Less: Accretion and dividends on convertible preferred stock	(1,554)	(712)	(4,217)	(2,112)
<b>Net loss attributable to common stockholders</b>	<b>\$ (7,785)</b>	<b>\$ (6,135)</b>	<b>\$ (20,411)</b>	<b>\$ (13,568)</b>
<b>Net loss per share attributable to common stockholders—basic and diluted</b>	<b>\$ (82.16)</b>	<b>\$ (73.73)</b>	<b>\$ (222.70)</b>	<b>\$ (303.72)</b>
<b>Common shares used to compute basic and diluted net loss per share attributable to common stockholders</b>	<b>94,753</b>	<b>83,204</b>	<b>91,650</b>	<b>44,672</b>

**Contacts**

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