

**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): **April 22, 2016**

**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 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officer.**

On April 22, 2016, Dr. Sinil Kim, the Chief Medical Officer and Vice President of Oncology of Mirna Therapeutics, Inc. ("Mirna" or the "Company"), resigned as Chief Medical Officer of the Company, effective immediately, while continuing as Vice President of Oncology. Effective as of April 25, 2016, Dr. Vincent O'Neill has been appointed Chief Medical Officer of the Company.

In connection with Dr. Kim's resignation and in consideration of his release of claims against the Company, the Company entered into a Transition and Separation Agreement (the "Agreement") with Dr. Kim. Under the Agreement, Dr. Kim will cease serving as an employee of the Company effective as of May 13, 2016 (the "Separation Date"). In the event Dr. Kim provides the Company a general release of claims on, or shortly after, the Separation Date, Dr. Kim will be entitled to (i) a severance payment equal to \$134,375, which represents five months of Dr. Kim's base salary in effect as of immediately prior to the Separation Date, and (ii) payment of his COBRA premiums for up to five months following the Separation Date. The Agreement also provides for Dr. Kim to continue to provide consulting and transition services to the Company until the three month anniversary of the Separation Date at a rate of \$10,000 a month, and Dr. Kim's outstanding stock options will continue to vest during such period.

The foregoing description of the material terms of the Agreement and general release of claims is not complete and is qualified in its entirety by reference to the full text of the Agreement, which the Company intends to file as an exhibit to its Quarterly Report on Form 10-Q for the quarter during which the Agreement was entered into.

A copy of the press release announcing the appointment of Dr. O'Neill is filed as Exhibit 99.1 to this Current Report.

**Item 9.01 Financial Statements and Exhibits.**

<b>Exhibit No.</b>	<b>Description</b>
99.1	Press release dated April 25, 2016.

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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: April 26, 2016

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

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## Mirna Therapeutics Appoints Vincent J. O'Neill, M.D., as Chief Medical Officer

**AUSTIN, TX—April 25, 2016**—Mirna Therapeutics, Inc. (Nasdaq: MIRN), a clinical stage biopharmaceutical company developing a broad pipeline of microRNA-based oncology therapeutics, today announced the appointment of Vincent J. O'Neill, M.D., B.Sc., M.R.C.P. as Chief Medical Officer, effective April 25, 2016.

Dr. O'Neill, a medical oncologist, joins Mirna with 15 years of therapeutic and diagnostic product development experience, with senior leadership roles at global pharmaceutical companies, including Sanofi, Genentech and GlaxoSmithKline. Most recently, he served as Chief Medical Officer at Exosome Diagnostics, where he oversaw global product development and medical affairs. At both Genentech and GlaxoSmithKline, he managed the clinical and biomarker development programs of several oncology therapeutic candidates. He was instrumental in the expanded approval of Genentech's Avastin® and Tarceva® oncology therapeutics. At GSK, he oversaw the signal transduction discovery unit and led the first IND application and clinical trial of MEK inhibitor MEKINIST®.

Dr. O'Neill will be assuming the role of Chief Medical Officer from Dr. Sinil Kim, who joined Mirna's executive team in 2013 and led the design and management of Mirna's Phase 1 clinical trial of MRX34, its lead product candidate and the first microRNA therapeutic in clinical development in cancer.

"We are excited that Vince is joining the Mirna team as we prepare to advance MRX34 into two Phase 2 trials later this year. His extensive leadership in product development across all phases of clinical study as well as his background in molecular pathology and translational research will significantly enhance our efforts as we move into this next stage of our Company's growth," said Dr. Paul Lammers, M.D., M.Sc., President and CEO. "We are grateful to Sinil for his foundational contributions to our pioneering work in microRNA therapeutics and for leading our MRX34 clinical development program to this stage. We wish him well."

Dr. O'Neill received his M.D. and his B.Sc. in molecular pathology, from the University of Glasgow. He has authored multiple peer-reviewed publications and conference presentations. Dr. O'Neill is also a member of the Royal College of Physicians.

### 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.mirnarx.com](http://www.mirnarx.com).

### 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 pre-clinical and clinical activity and results of our clinical development program, including the projected timing and nature of Phase 2 studies of MRX34; and our beliefs regarding our potential for growth. 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 Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) on March 30, 2016.*

### Investors

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Source: Mirna Therapeutics, Inc.

