FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| | OMB APPROVAL | | | | | | | | | |
|---|--------------------------|-----------|--|--|--|--|--|--|--|--|
| | OMB Number: | 3235-0287 | | | | | | | | |
| l | Estimated average burden | | | | | | | | | |
| l | hours nor resnance: | 0.5 | | | | | | | | |

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person* Irvin Jon | | | | | | 2. Issuer Name and Ticker or Trading Symbol Mirna Therapeutics, Inc. [MIRN] | | | | | | | | | check a | ıll app Direc | licable) | | Issuer Owner er (specify | |
|---|--|--|---|-------------------|--|--|---|-------|--|----------|--|---|------------------------|--------------|--|------------------------------------|---|---|--|--|
| (Last) (First) (Middle) C/O MIRNA THERAPEUTICS, INC. 3711 SOUTH MOPAC EXPRESSWAY, STE 100 | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 11/01/2016 | | | | | | | | | X | belov | | w) | | |
| (Street) AUSTIN TX 78746 (City) (State) (Zip) | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | | Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transact Date (Month/Day | | | | | | Execution Date | | Date, | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 | | | | l and 5) Secui Bene | | cially I Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | | | | Code | v | Amount | (A) (D) | or | Price | 1 | Transaction(s) (Instr. 3 and 4) | | | (, | |
| Common | Stock | 2016 | | | S ⁽¹⁾ | | 280 |] |) | \$1.2839 | | 9 8,055 | | D | | | | | | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution E if any (Month/Day | ution Date, Trans | | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercis Expiration Dat (Month/Day/Ye | | e | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | | 8. Pric Deriva Securi (Instr. | ative rity . 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(: (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | v | (A) | (D) | Date Exercisa | able | Expiration Date | Title | or Nun of Sha | mber ires | | | | | | |

Explanation of Responses:

1. Transaction made pursuant to a 10b5-1 trading plan adopted by the Reporting Person on June 29,2016.

/s/ Jon Irvin

11/02/2016

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.