

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

| | | |
|---|--|---|
| 1. Name and Address of Reporting Person* Halak Brian K (Last) (First) (Middle) C/O DOMAIN ASSOCIATES, LLC ONE PALMER SQUARE (Street) PRINCETON NJ 08542 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol Dicerna Pharmaceuticals Inc [DRNA] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below) |
| | 3. Date of Earliest Transaction (Month/Day/Year) 06/07/2018 | |
| 4. If Amendment, Date of Original Filed (Month/Day/Year) | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|---------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | 06/07/2018 | | M | | 21,041 | A | \$7 | 3,490,070 | I | By Domain Partners VIII, L.P. ⁽¹⁾ |
| Common Stock | 06/07/2018 | | M | | 156 | A | \$7 | 25,886 | I | By DP VIII Associates, L.P. ⁽¹⁾ |
| Common Stock | 06/07/2018 | | F | | 10,195 | D | \$14.45 | 3,479,875 | I | By Domain Partners VIII, L.P. ⁽¹⁾ |
| Common Stock | 06/07/2018 | | F | | 76 | D | \$14.45 | 25,810 | I | By DP VIII Associates, L.P. ⁽¹⁾ |

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 Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|--|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | | Title |
| Warrant to Purchase Common Stock | \$7 | 06/07/2018 | | M | | 21,041 | | 01/29/2014 | 06/26/2018 | Common Stock | 21,041 | \$0 | 0 | I | By Domain Partners VIII, L.P. ⁽¹⁾ |
| Warrant to Purchase Common Stock | \$7 | 06/07/2018 | | M | | 156 | | 01/29/2014 | 06/26/2018 | Common Stock | 156 | \$0 | 0 | I | By DP VIII Associates, L.P. ⁽¹⁾ |

Explanation of Responses:

1. The Reporting Person is a Managing Member of One Palmer Square Associates VIII, LLC, which is the sole general partner of Domain Partners VIII, L.P. and DP VIII Associates, L.P. Pursuant to Instruction (4)(b)(iv) of Form 4, the Reporting Person has elected to report as indirectly beneficially owned the entire number of securities beneficially owned by each such entity. The Reporting Person disclaims beneficial ownership of any securities, and any proceeds thereof, that exceed his pecuniary interest therein and/or that are not actually distributed to him.

Remarks:

/s/ Lisa A. Kraeutler, Attorney-
in-Fact 06/11/2018

** 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.