UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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): October 25, 2018

DICERNA PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	001-36281	20-5993609
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification Number)

87 Cambridgepark Drive
Cambridge, MA 02140
(Address of principal executive offices, including Zip Code)

Registrant's telephone number, including area code: (617) 621-8097

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-4c))

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

Item 1.01 Entry into a Material Definitive Agreement.

On October 25, 2018, Dicerna Pharmaceuticals, Inc. (the "Company") and Eli Lilly and Company ("Lilly") entered into a Collaboration and License Agreement (the "Lilly Collaboration Agreement"). The Lilly Collaboration Agreement is for the discovery, development, and commercialization of potential new medicines in the areas of cardio-metabolic disease, neurodegeneration, and pain. Under the terms of the Lilly Collaboration Agreement, the Company and Lilly will seek to use the Company's proprietary GalXC™ RNAi technology platform to progress new drug targets toward clinical development and commercialization. In addition, the Company and Lilly will collaborate to develop a new nucleic acid platform technology to generate next-generation oligonucleotide therapeutic agents.

The Lilly Collaboration Agreement provides that the Company will work exclusively with Lilly in the neurodegeneration and pain fields with the exception of mutually agreed upon orphan indications. Additionally, the Company will work exclusively with Lilly on select targets in the cardio-metabolic field. Under the Lilly Collaboration Agreement, the Company will provide Lilly with exclusive and non-exclusive licenses to support the companies' activities and to enable Lilly to commercialize products derived from or containing compounds developed pursuant to such agreement. The Lilly Collaboration Agreement contemplates in excess of 10 targets.

Under the terms of the Lilly Collaboration Agreement, Lilly will pay the Company a non-refundable, non-creditable upfront payment of $100.0 million, with Lilly making a concurrent $100.0 million equity investment in the Company pursuant to a share issuance agreement between the parties (the "Lilly Share Issuance Agreement"). Under the Lilly Collaboration Agreement, the Company is also eligible to receive up to approximately $350.0 million per target in development and commercialization milestones, in addition to a $5.0 million payment due when the first non-hepatocyte target achieves proof of principle. In addition, the Lilly Collaboration Agreement also provides that Lilly will pay to the Company mid-single to low-double digit royalties on product sales on a country-by-country and product-by-product basis until the later of expiration of patent rights in a country, the expiration of data or regulatory exclusivity in such country, or 10 years after the first product sale in such country, subject to certain royalty step-down provisions set forth in the agreement.

The Lilly Collaboration Agreement includes various representations, warranties, covenants, indemnities, and other customary provisions. Lilly may terminate the Lilly Collaboration Agreement at any time without cause following a 90-day notice period. Either party may terminate the Lilly Collaboration Agreement in the event of an uncured material breach of the other party. The Lilly Collaboration Agreement is subject to clearance under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "HSR Act"), and other customary closing conditions.

Lilly Share Issuance Agreement

In connection with the Lilly Collaboration Agreement, the Company and Lilly entered into the Lilly Share Issuance Agreement on October 25, 2018, pursuant to which the Company agreed to issue to Lilly 5,414,185 shares (the "Lilly Shares") of the Company's common stock, par value $0.0001 per share ("Common Stock"), at a purchase price of $18.47 per share, for an aggregate purchase price of approximately $100.0 million. The issuance of the Lilly Shares is subject to clearance under the HSR Act and other customary closing conditions. The Lilly Share Issuance Agreement contains customary representations, warranties, and covenants of each party. The Lilly Share Issuance Agreement will automatically terminate if the Lilly Collaboration Agreement is terminated prior to the closing of the transactions contemplated by the Lilly Share Issuance Agreement.

Pursuant to the terms of the Lilly Share Issuance Agreement, Lilly may not, without the prior approval of the Company or except in the case of a third party tender offer, dispose of any of the Lilly Shares for a nine-month period of time commencing on the closing date of the Lilly Share issuance. Additionally, under the Lilly Share Issuance Agreement, Lilly may participate in some public offerings and private placements of the Company, subject to share ownership requirements and other limitations set forth in the Lilly Share Issuance Agreement.

The foregoing summaries are qualified in their entirety by reference to the Lilly Collaboration Agreement and Lilly Share Issuance Agreement (together, the "Agreements"). The Company will seek confidential treatment from the Securities and Exchange Commission for portions of the Lilly Collaboration Agreement. The Agreements, subject to such confidential treatment with respect to the Lilly Collaboration Agreement, will be filed as exhibits to the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Item 3.02 Unregistered Sale of Equity Securities.

As described in the section titled "*Lilly Share Issuance Agreement*" in Item 1.01 of this Current Report on Form 8-K, which is incorporated in this Item 3.02 by reference, the Company agreed to sell the Lilly Shares to Lilly on October 25, 2018 pursuant to the Lilly Share Issuance Agreement and subject to the satisfaction of the closing conditions contained therein. The Lilly Shares were offered and will be issued in a private placement exempt from registration pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), or Regulation D promulgated thereunder, as a transaction by an issuer not involving a public offering. Lilly has represented it will acquire the Lilly Shares for investment only and not with the intent to sell in connection with any distribution thereof, and an appropriate legend will be applied to the Lilly Shares.

Item 7.01 Regulation FD Disclosure.

The Company had cash, cash equivalents, and held-to-maturity investments of approximately $180.4 million as of September 30, 2018. On a pro-forma basis, inclusive of the upfront payments and equity investments from Lilly and from the Company's recent collaboration with Alexion Pharma Holding Unlimited Company, an affiliate of Alexion Pharmaceuticals, Inc., as disclosed in the Company's Current Report on Form 8-K filed on October 24, 2018, the Company's total cash, cash equivalents, and held-to-maturity investments as of September 30, 2018 would be approximately $404.4 million.

The information in this Item 7.01 is intended to be furnished and 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 Sections 11 and 12(a)(2) of the Securities Act. The information contained herein shall not be incorporated by reference into any of the Company's filings with the United States Securities and Exchange Commission, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Cautionary Note on Forward-Looking Statements

This Current Report on Form 8-K includes forward-looking statements. Such forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. Examples of forward-looking statements include, among others, statements we make regarding: (i) development or sales milestone payments, or royalty payments, or (ii) therapeutic and commercial potential of GalXC™ inferred from the statements regarding such payments. The process by which an early stage platform such as GalXC could potentially lead to an approved product is long and subject to highly significant risks, particularly with respect to a pre-clinical research collaboration. Applicable risks and uncertainties include those relating to our pre-clinical research and other risks identified under the heading "Risk Factors" included in the Company's most recent Form 10-Q filing and in other future filings with the SEC. The forward-looking statements contained in this Current Report on Form 8-K reflect the Company's current views with respect to future events, and the Company does not undertake and specifically disclaims any obligation to update any forward-looking statements.

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.

Date: October 29, 2018

DICERNA PHARMACEUTICALS, INC.

By: /s/ Douglas M. Fambrough, III
Douglas M. Fambrough, III, Ph.D.
Chief Executive Officer