
**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): May 7, 2020

DICERNA PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-36281
(Commission
File Number)

20-5993609
(IRS Employer
Identification Number)

33 Hayden Avenue
Lexington, Massachusetts
(Address of registrant's principal executive office)

02421
(Zip code)

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

(Former name or former address, if changed since last report)

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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	DRNA	The Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

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 2.02 Results of Operations and Financial Condition.

On May 7, 2020, Dicerna Pharmaceuticals, Inc., a Delaware corporation (the “Company”, “we” or “us”), issued a press release announcing its financial and operational results for the quarter ended March 31, 2020. A copy of the press release is furnished herewith as Exhibit 99.1.

On April 30, 2020, the Company announced that it would hold a conference call and live audio webcast at 4:30 p.m., Eastern time, on May 7, 2020, to discuss its financial and operational results and to provide a general business update.

The information in this Item 2.02 and Exhibit 99.1 attached hereto is being 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 liability of that section, nor shall such information be deemed to be incorporated by reference in any registration statement or other document filed under the Securities Act of 1933, as amended, or the Exchange Act, except as otherwise stated in such filing. On May 7, 2020, Dicerna Pharmaceuticals, Inc., a Delaware corporation (the “Company”), issued a press release announcing its financial and operational results for the quarter ended March 31, 2020. A copy of the press release is furnished herewith as Exhibit 99.1.

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

On May 7, 2020 we announced that Douglas Pagán was appointed to serve as the Company’s Chief Financial Officer, to be effective on May 26, 2020.

Mr. Pagán will succeed John “Jack” Green, who, as previously announced, notified us of his intention to retire from his position of chief financial officer of the Company. Mr. Green’s departure was not due to any disagreement with the Company regarding its operations, financial reporting, policies or procedures. The terms of Mr. Green’s transition agreement, as previously disclosed, will continue, including with respect to the consulting period as contemplated therein.

Mr. Pagán currently serves as the chief financial officer and secretary of KSQ Therapeutics, Inc. since April 2019. Prior to joining KSQ Therapeutics, Inc., Mr. Pagán was the chief financial officer of Paratek Pharmaceuticals, Inc. from December 2014 through April 2019. Prior to that, from April 2008 to December 2014, Mr. Pagán served as the Vice President of Finance at Acceleron Pharma, Inc. Prior to working at Acceleron, Mr. Pagán served in strategic and financial management roles at Biogen Idec and Bristol-Myers Squibb. Previously, Mr. Pagán worked in healthcare investment banking at J.P. Morgan, as well as pharmaceutical operational roles at Johnson & Johnson. Mr. Pagán received his B.S.E. in Chemical Engineering from Princeton University and his M.B.A. from Columbia Business School.

In connection with his appointment, Mr. Pagán entered into an employment agreement with the Company, effective as of May 26, 2020, pursuant to which Mr. Pagán will receive an annual base salary of \$405,000 and will be eligible to participate in the Company’s annual bonus program, with a target opportunity equal to 40% of his base salary. In addition, Mr. Pagán will receive a one-time signing bonus of \$100,000, subject to the terms contained in the employment agreement. The employment agreement also provides, among other things, that if the Company terminates him other than for “cause” (as defined in the employment agreement) or if Mr. Pagán terminates his employment for “good reason” (as defined in the employment agreement), then Mr. Pagán will receive the following severance benefits: (i) 12 months of continued base salary payments; (ii) a pro rata portion of his annual bonus for the year in which the termination occurs, based on actual performance determined under the Company’s annual bonus program as then in effect; and (iii) up to 12 months of Company-reimbursed COBRA premiums. In addition, if the Company terminates Mr. Pagán other than for cause or if he terminates his employment for good reason during the one-year period following a change of control (as defined in the employment agreement), then Mr. Pagán will receive the following severance benefits: (i) a lump sum severance payment equal to the sum of Mr. Pagán’s annual base salary and target annual bonus for the year in which the termination occurs; (ii) a pro rata portion of Mr. Pagán’s target bonus for the year in which the termination occurs; and (iii) up to one year of Company-reimbursed COBRA premiums. In addition, notwithstanding anything to the contrary in any applicable option agreement or stock-based award agreement, all time-based stock options and other time-based stock-based awards held by Mr. Pagán, to the extent unvested as of immediately prior to the change of control, will vest in full upon such change of control. Under the terms of the employment agreement, if any payment or other benefit provided to Mr. Pagán pursuant to his employment agreement constitutes an “excess parachute payment” within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the “Code”), and would be subject to an excise tax imposed by Section 4999 of the Code, then the amounts actually paid to Mr. Pagán will be reduced to the extent that such a reduction would result in Mr. Pagán receiving a greater amount than he would have received if the payment had been made in full. Mr. Pagán’s right to receive these severance benefits is subject to his providing a release of claims in favor of us, the content of which release is contained in a supplemental side letter between Mr. Pagán and us. Mr. Pagán has also entered into an agreement that includes non-solicitation covenants in favor of us that apply during his employment with us and for two years thereafter.

The foregoing description of Mr. Pagán’s employment agreement does not purport to be complete and is qualified in its entirety by reference to the full text of such agreement, a copy of which is filed as Exhibit 10.1 to this Current Report on Form 8-K.

The Company hereby incorporates by reference the information relating to the appointment of Mr. Pagán and departure of Mr. Green set forth in the press release issued on May 7, 2020, a copy of which is furnished as Exhibit 99.2 to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
10.1	Employment Agreement by and between the Company and Douglas Pagán, dated as of May 26, 2020.
99.1	Press release, entitled “Dicerna Announces First Quarter 2020 Financial Results and Provides a Business Update.”
99.2	Press Release titled “Dicerna To Appoint Douglas Pagán as Chief Financial Officer” issued by the Company on May 7, 2020.

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: May 7, 2020

DICERNA PHARMACEUTICALS, INC.

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

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT (“Agreement”) made this May 26th, 2020 (the “Effective Date”) between Dicerna Pharmaceuticals, Inc., a Delaware corporation (“Company”), on the one hand and Douglas Pagán (the “Executive”) on the other hand.

WHEREAS, the Company desires to employ the Executive and the Executive desires to be employed by the Company, on terms set forth herein;

NOW, THEREFORE, in consideration of the mutual agreements set forth herein, the parties agree as follows:

1. Term of Employment.

The Executive’s employment under this Agreement shall commence on the Effective Date and shall end on such date as the Executive’s employment terminates in accordance with Section 4 of this Agreement. Subject to the balance of this Agreement, the Executive shall be an at-will employee of the Company whose employment may be terminated (by the Company or by the Executive) at any time, for any or no reason, in which case the Executive will be entitled to the separation benefits set forth in Section 4, below.

2. Duties.

During his employment with the Company, the Executive shall have the title of Chief Financial Officer. The Executive shall devote his full business time and effort to the performance of his duties for the Company, which he shall perform faithfully and to the best of his ability. The Executive shall have all of the customary powers and duties associated with his position and shall be subject to the Company’s policies, procedures, and approval practices, as generally in effect from time to time for all senior executives of the Company and the direction and oversight of the Board. The Executive will report directly to the Chief Executive Officer of the Company.

3. Compensation and Related Matters.

a. **Base Salary.** The Company shall pay the Executive base salary at a rate of \$16,875 paid twice monthly (which annualizes to \$405,000), less withholdings and deductions required and/or permitted by law. The Executive’s base salary shall be paid in conformity with the Company’s payroll practices generally applicable to the Company’s senior executives.

b. **Signing and Annual Bonus.** The Company shall pay the Executive a one-time signing bonus (the “Signing Bonus”) of \$100,000 (less applicable withholding taxes and deductions) payable within 30 days of the Executive’s start date at the Company. The Signing Bonus is subject to the following repayment obligations: as a condition of the Executive’s employment with the Company and for receiving the Signing Bonus, the Executive agrees that if, at any time during the twelve months following the Executive’s first date of employment with the Company (the “Effective Date”), the Executive (a) resigns his employment with the Company other than for Good Reason, he shall repay the Signing Bonus, on a pro-rata basis based on length of service with such pro-rata portion calculated by multiplying the amount of such Signing Bonus by a fraction: (x) the numerator of which is the number of days worked by the Executive during the period commencing on the Effective Date and ending on the last day of his employment with the Company, and (y) the denominator of which is three hundred sixty five (365); or (b) the Company terminates the Executive’s employment for Cause, he shall repay the Signing Bonus in-full. With respect to any amount required to be repaid to the Company by the Executive pursuant to the foregoing sentence, the Executive will provide payment of such amount within thirty days (30) of his last date of employment. The Executive shall be eligible to be considered for an Annual Bonus upon achieving of certain pre-determined performance targets consistent with any Incentive Compensation Plan established by the Compensation Committee (the “Committee”). The Annual Bonus shall be based, in part, on the Executive’s performance. The grant of such a bonus shall be in the sole discretion of the Committee. The maximum bonus amount for which the

Executive will be eligible is forty percent (40%) of base salary earned for the calendar year, provided that, the Annual Bonus for the first year of employment will not be prorated based on the date of hire. The Annual Bonus will be earned only after it has been granted by the Committee. The Annual Bonus shall be paid to the Executive following the close of the fiscal year to which it relates, in no event later than March 15th of the calendar year immediately following the calendar year in which it was earned. The Executive must be actively employed by the Company at the time the Committee considers granting of bonuses to be eligible to receive such bonus.

- c. **Equity Compensation.** Subject to the approval of the Board or an appropriate committee thereof, the Executive shall be eligible for:
- i. a stock option grant (the "Option Grant") to purchase in total up to 95,650 shares of the Company's Common Stock at an exercise price equal to the fair market value of each share on the date of grant as determined by the Board or an appropriate committee thereof. The Option Grant shall vest in accordance with the following schedule: 25% of the shares underlying the Option Grant will vest on the twelve (12) month anniversary of Executive's commencement of full-time employment with the Company and the remaining shares will vest and become exercisable on a pro rata, monthly basis thereafter on the same day of the month as the vesting commencement date (or if there is no corresponding day, on the last day of the month), such that all shares underlying the Option Grant shall have vested on the fourth anniversary of the vesting commencement date. Vesting of the Option Grant will be subject to Executive's continued status as a service provider with the Company at each such vesting period. The Option Grant will be subject to the terms of a stock plan and a stock option agreement that the Company and Executive will be required to execute; provided that, notwithstanding anything to the contrary in the applicable stock option agreement, the definition of "Cause" for purposes of such stock option agreement shall be the definition of "Cause" as set forth in Section 4.c of this Agreement.
 - ii. a grant of an award of an aggregate 27,300 restricted stock units (the "RSU Grant"). The RSU Grant shall vest in accordance with the following schedule: Twenty-five percent (25%) of the total number of restricted stock units granted will vest on June 15, 2021 and on the first, second and third anniversaries of that date, subject to your continued employment with the Company. Vesting of the RSU Grant will be subject to Executive's continued status as a service provider with the Company at each such vesting period. The RSU Grant will be subject to the terms of the governing plan document and a restricted stock unit award agreement that the Company and the Executive will be required to execute.
- d. **Benefits.** During his employment with the Company, the Executive shall be entitled to participate in all employee benefit plans and programs, including paid sick leave and holidays, life insurance, disability, medical, dental, and retirement savings plans, to the same extent generally available to senior executives of the Company, in accordance with the terms of those plans and programs. The Executive shall be permitted up to four weeks of paid vacation per year, which will accrue on a monthly basis. The Executive will not be allowed to accumulate more than three weeks of unused vacation days at any given time. The Executive may carry over a maximum of ten unused vacation days from one calendar year to the next.
- e. **Expenses.** The Company agrees to reimburse the Executive for reasonable out-of-pocket expenses incurred in connection with Company business and within standards to be established by the Board from time to time, including, without limitation, travel and accommodations for authorized business trips, provided vouchers therefor, or other supporting information as the Company may reasonably require, are presented to the Company. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the rules and regulations thereunder ("Section 409A") including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement); (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year; (iii) the reimbursement of an eligible expense shall be made no later than the last day of the calendar year following the

year in which the expense is incurred; and (iv) the right to reimbursement or in kind benefits is not subject to liquidation or exchange for another benefit.

f. **Indemnification.** The Company agrees to indemnify and hold harmless, and advance expenses to, the Executive for the Executive's conduct as an officer, director and employee of the Company and to provide the Executive with directors' and officers' liability insurance coverage, to the same extent and on the same terms that the Company provides such aforementioned indemnification right and liability insurance coverage to similarly situated officers and directors of the Company.

4. **Termination**

a. **Rights and Duties.** The Executive is an employee "at will." Accordingly, the Company or the Executive may terminate his employment, at any time with or without cause, for any lawful reason, or no reason. The Executive and the Company agree that, without modifying or altering the Executive's "at will" status, each will provide the other with at least thirty (30) days' prior written notice of termination of the Executive's employment with the Company. If the Executive gives notice of termination, except in the case of a termination by the Executive for "Good Reason" as set forth below, such notice will be deemed a voluntary resignation by the Executive and the Company, in its sole discretion, may elect to relieve the Executive of any obligation to perform duties during the notice period, waive the notice period and immediately accept termination of the Executive's employment, without changing the status of such termination as a voluntary resignation by the Executive. Should the Company in the event of a voluntary resignation decide to relieve the Executive of any obligation to perform duties during the notice period, waive the notice period and immediately accept termination of the Executive's employment, it shall nonetheless continue his compensation and benefits for the term of the notice period, except that no bonus shall be earned or awarded during and after the notice period.

b. **Termination for "Good Reason."** The Executive may terminate his employment at any time for "Good Reason." "Good Reason" shall comport with the requirements of Regulation §1.409A-1(n)(2)(ii) and shall mean:

- i. A material diminution in the Executive's authority, duties or responsibilities or requiring the Executive to report to an executive other than the Company's chief executive officer;
- ii. A material diminution by the Company of the Executive's annual base compensation then in effect, except a material diminution generally affecting the members of the Company's management;
- iii. Any action or inaction by the Company that constitutes a material breach by the Company of the terms of this Agreement; or
- iv. A requirement that the Executive be based more than 50 miles from the offices at which he was principally employed immediately prior to the date of termination.

The parties acknowledge and agree that "Good Reason" shall not be deemed to have occurred unless: (1) the Executive provides the Company with written notice that he intends to terminate his employment hereunder for one of the Good Reason grounds set forth in Section 4.b. within sixty (60) days of the initial occurrence of such ground, with such notice containing a description of such ground, (2) if such Good Reason ground is capable of being cured, the Company has failed to cure such ground within a period of thirty (30) days from the date of such written notice, and (3) the Executive terminates his employment within ninety-one (91) days from the date that such Good Reason ground first occurs. For purposes of clarification, the above-listed conditions shall apply separately to each occurrence of a Good Reason ground, and failure to adhere to such conditions in the event of the occurrence of grounds that would otherwise have constituted Good Reason had the conditions herein been satisfied shall not disqualify the Executive from asserting and satisfying the conditions for Good Reason for any subsequent occurrence that may constitute Good Reason.

c. **Termination by the Company for Cause.** The Company may terminate the Executive's employment at any time for "Cause." "Cause" shall mean:

- i. The Executive's commission of an act of fraud, dishonesty, breach of fiduciary duty or misappropriation which may or does adversely affect the Company;
- ii. The Executive's conviction or plea of guilty or *nolo contendere* to or engaging in any felony or crime involving moral turpitude, fraud, misrepresentation or other crime and/or indictment for a crime that, in the reasonable opinion of the Company, affects the Executive's ability to perform the duties set forth in this Agreement and/or reflects negatively upon the Company;
- iii. Unauthorized disclosure by the Executive of the Company's Proprietary Information, as defined in the Nondisclosure Agreement (as defined in Section 5 below), which results or could have been reasonably foreseen to result, in a material financial loss to the Company;
- iv. The Executive's material breach of this Agreement or the Nondisclosure Agreement; provided, that if such breach is reasonably possible of being cured in the opinion of the Company, then the Executive will be given thirty (30) days after written notice from the Company of such breach to cure; or
- v. The Executive's failure (which shall not include any Disability as defined below) or refusal to perform the duties and responsibilities of his employment and/or to follow the policies and procedures of the Company, including without limitation the failure or refusal to carry out lawful instructions from the Board. If such failure or refusal is reasonably possible of being cured in the opinion of the Company, then the Executive will be given thirty (30) days after written notice from the Company of such failure or refusal to cure.

d. **Termination in the Event of Death or Disability.** The Agreement shall terminate upon the Executive's death or Disability, and the Executive's employment with the Company shall thereupon terminate. For purposes of the Agreement, "Disability" is defined as any illness, injury, accident or condition of either a physical or psychological nature as a result of which the Executive is unable to perform the essential functions of his duties and responsibilities hereunder for 90 days during any period of 365 consecutive calendar days or for any consecutive 90-day period.

e. **Effect of Termination.**

- i. If the Executive is terminated by the Company for Cause, or by the Executive voluntarily other than for Good Reason, then the Executive will only be entitled to payment when due of any unpaid base salary, expense reimbursements, and vacation days accrued but unused prior to termination of employment.
- ii. If the Executive's employment is terminated by the Company other than for Cause, or by the Company due to the Executive's Disability, or by the Executive for Good Reason (each of which will be deemed an involuntary termination), then the Executive will be entitled to payment when due of any unpaid base salary, expense reimbursements, and vacation days accrued prior to termination of employment and, in exchange for the Executive's execution of a separation agreement and general release provided by the Company (including, at the Company's option, a non-competition obligation during any salary continuation period and (at the Company's option) a revocation period of seven (7) business days) and expressly subject to the conditions described in Section 4.e.vi. below, the following:
 - 1) Continuation of the Executive's base salary at the rate in effect as of the day immediately preceding his date of termination for a twelve (12) month period, payable in accordance with the Company's regular payroll practices, less applicable withholdings, commencing at the conclusion of the Review Period (as described below), *provided* that the first installment of such payments shall include all amounts which would have been paid during the period between the Executive's date of termination and the date of such first installment;

- 2) Payment of a pro-rata portion of the actual amount of the Executive's Annual Bonus based on actual performance determined under the terms of the Company's annual bonus program as then in effect, with such pro-rata portion calculated by multiplying the actual amount of such bonus for the year in which such termination occurs by a number: (x) the numerator of which is the number of days worked by the Executive during the fiscal year prior to termination, and (y) the denominator of which is three hundred sixty five (365), with such payment to be made after the determination of the bonus funding level (but in no event later than March 15 of the calendar year following the year in which the Executive's termination occurs); and
 - 3) The Executive shall be eligible to continue health benefits pursuant to COBRA or the appropriate state equivalent. If the Executive is eligible for and properly elects continuation of such coverage during the permissible time frame, the Company will pay the premiums for such group health insurance coverage for the shorter of (i) twelve (12) months or (ii) until the Executive becomes eligible for health benefits through another employer or otherwise. After the shorter period, the Executive will be responsible for premium payments for continuation of such group health insurance coverage pursuant to the terms and conditions of COBRA.
- iii. If the Agreement is terminated because of the Executive's death, the Company shall pay to the estate of the Executive the salary and benefits which would otherwise have been payable to the Executive up to the date of termination of his employment because of death.
- iv. In the event of a Change of Control (as defined below) occurs and, if within one (1) year thereafter, the Executive's employment is terminated by the Company other than for Cause, or by the Company due to the Executive's Disability, or by the Executive for Good Reason (each of which will be deemed an involuntary termination), then the Executive will be entitled to payment when due of any unpaid base salary, expense reimbursements, and vacation days accrued prior to termination of employment and, in exchange for the Executive's execution of a separation agreement and general release provided by the Company (including, at the Company's option, a non-competition obligation during any salary continuation period and (at the Company's option) a revocation period of seven (7) business days) and expressly subject to the conditions described in Section 4.e.vi. below, the following:
- 1) A lump sum payment equal to the sum of (i) one (1) year of the Executive's base salary at the rate in effect as of the day immediately preceding his date of termination, less applicable withholdings, plus (ii) the Executive's target annual bonus for the year in which the termination occurs, less applicable withholdings, payable at the conclusion of the Review Period (as described below);
 - 2) The Executive shall be eligible to continue health benefits pursuant to COBRA or the appropriate state equivalent. If the Executive is eligible for and properly elects continuation of such coverage during the permissible time frame, the Company will pay the premiums for such group health insurance coverage for the shorter of (i) one (1) year or (ii) until the Executive becomes eligible for health benefits through another employer or otherwise. After the shorter period, the Executive will be responsible for premium payments for continuation of such group health insurance coverage pursuant to the terms and conditions of COBRA; and
 - 3) Payment of a pro-rata portion of the target amount of the Executive's annual bonus, with such pro-rata portion calculated by multiplying the target amount of such bonus for the year in which such termination occurs by a number: (x) the numerator of which is the number of days worked by the Executive during the fiscal year prior to termination, and (y) the denominator of which is three hundred sixty five (365), with such payment to be made at the conclusion of the Review Period (but in no event later

than March 15 of the calendar year following the year in which the Executive's termination occurs).

- v. In addition, in the event of a Change of Control, notwithstanding anything to the contrary in any applicable option agreement or stock-based award agreement, all time-based stock options and other time-based stock-based awards held by the Executive, to the extent unvested as of immediately prior to the Change of Control shall immediately accelerate and become fully exercisable or nonforfeitable immediately prior to the consummation of the Change of Control.

For purposes of this Agreement, "Change of Control" means (A) the occurrence of a merger or consolidation of the Company whether or not approved by the Board, other than (i) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity or parent of such corporation outstanding immediately after such merger or consolidation, or (ii) a merger or consolidation which is in effect a financing transaction for the Company, including, but not limited to, a reverse merger of the Company into a publicly traded "shell" company, or (B) the stockholders of the Company approve an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets, provided that, in any case, "Change of Control" shall be in accordance with Regulation §1.409A-3(i)(5).

- vi. Payment of the severance pay and benefits described in Section 4.e.ii. or 4.e.iv., as applicable, is expressly conditioned on the Executive's execution without revocation of the separation agreement and general release described therein, within the time period prescribed in the separation agreement and general release (which release shall include, at the Company's option, a non-competition obligation during any salary continuation period and (at the Company's option) a revocation period of seven (7) business days), and will commence immediately following a sixty (60) day period following the effective date of the Executive's separation from service from the Company (the "Review Period") (with the exception of the pro rata annual bonus payment described in Section 4.e.ii.b., which shall be payable after the bonus funding level is determined but in no event later than March 15 of the calendar year following the year in which the Executive's termination occurs). The separation agreement and general release will be provided to the Executive on or before the fifth (5th) day following such separation from service. If the Executive fails or refuses to return such agreement within the Review Period, the applicable severance payments and benefits will be forfeited. If the Executive is eligible for the severance pay and benefits described in Section 4.e.ii., then he shall not be eligible for and shall not receive the severance pay and benefits described in Section 4.e.iv. Similarly, if the Executive is eligible for the severance pay and benefits described in Section 4.e.iv., then he shall not be eligible for and shall not receive the severance pay and benefits described in Section 4.e.ii.
- vii. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to the Executive under any of the provisions of this Agreement, nor shall the amount of any payment hereunder be reduced by any compensation earned by Executive as a result of subsequent employment.

5. **Nondisclosure, Non-Solicitation and Assignment Agreement.** As a condition of the Executive's employment by the Company and the payment of compensation and receipt of benefits referred to above, the Executive agrees to continue to be bound by the terms of the standard **Nondisclosure, Non-Solicitation and Assignment Agreement**, entered into by the Executive as of May 26th, 2020 (the "Nondisclosure Agreement"). The Executive acknowledges that the Company would not offer him employment or provide compensation and/or benefits set forth above if he was not willing to be bound by the terms of such Nondisclosure Agreement.

- 6. **Notice.**

- a. **To the Company.** The Executive will send all communications to the Company in writing, addressed as follows (or in any other manner the Company notifies him to use):

Douglas M. Fambrough III, Ph.D. President and CEO
Dicerna Pharmaceuticals, Inc.
33 Hayden Ave
Lexington, MA 02140

With a copy to:

General Counsel
Dicerna Pharmaceuticals, Inc.
33 Hayden Ave
Lexington, MA 02140

- b. **To the Executive.** All communications from the Company to the Executive relating to this Agreement shall be sent to the Executive in writing, at the most recent address on file with the Company.

With a copy to:

Douglas Pagán
5 Winthrop Street Winchester, MA 01890

- c. **Time Notice Deemed Given.** Notice shall be deemed to have been given when delivered or, if earlier (1) three business days after mailing by United States certified or registered mail, return receipt requested, postage prepaid, or (2) sent by overnight mail or delivery with confirmation of delivery, in either case, addressed as required in this section.

7. **Amendment.** No provisions of this Agreement may be modified, waived, or discharged except by a written document signed by a Company officer duly authorized by the Board and the Executive. A waiver of any conditions or provisions of this **Agreement** in a given instance shall not be deemed a waiver of such conditions or provisions at any other time in the future.

8. **Choice of Law; Forum Selection.** The validity, interpretation, construction, and performance of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts without regard to its conflicts of laws principles. Any claims or legal actions by one party against the other regarding this Agreement shall be commenced and maintained exclusively in any state or federal court located in the Commonwealth of Massachusetts, and the parties hereby submit to the jurisdiction and venue of any such court.

9. **Successors.** This Agreement shall be binding upon, and shall inure to the benefit of, the Executive and his estate, but the Executive may not assign or pledge this Agreement or any rights arising under it. Without the Executive's consent, the Company may assign this Agreement to any affiliate or to a successor to substantially all the business and assets of the Company.

10. **Taxes; Code Sections 409A and 280G.**

- a. The Company shall withhold taxes from payments it makes pursuant to this Agreement as it reasonably determines to be required by applicable law.
- b. If the benefits set forth in Section 4.e. of this Agreement constitute "non-qualified deferred compensation" subject to Section 409A, then the following conditions apply to the payment of such benefits:
- i. Any termination of the Executive's employment triggering payment of benefits under Section 4.e. must constitute a "separation from service" under Section 409A(a)(2)(A)(i) of the Code, and Treas. Reg.
- ii. §1.409A-1(h) before distribution of such benefits can commence. To the extent that the termination of the Executive's employment does not constitute a

separation of service under Section 409A(a)(2)(A)(i) of the Code and Treas. Reg. §1.409A-1(h) (as the result of further services that are reasonably anticipated to be provided by the Executive to the Company at the time the Executive's employment terminates), any benefits payable under Section 4.e. that constitute non-qualified deferred compensation under Section 409A shall be delayed until after the date of a subsequent event constituting a separation of service under Section 409A(a)(2)(A)(i) of the Code and Treas. Reg. §1.409A-1(h). For purposes of clarification, this Section shall not cause any forfeiture of benefits on the Executive's part but shall only act as a delay until such time as a "separation from service" occurs.

- iii. If the Executive is a "specified employee" (as that term is used in Section 409A and regulations and other guidance issued thereunder) on the date his separation from service becomes effective, any benefits payable under Section 4.e. that constitute non-qualified deferred compensation subject to Section 409A shall be delayed until the earlier of: (A) the business day following the six-month anniversary of the date his separation from service becomes effective, or (B) the date of the Executive's death, but only to the extent necessary to avoid the adverse tax consequences and penalties under Section 409A. On the earlier of: (A) the business day following the six-month anniversary of the date his separation from service becomes effective, or (B) the Executive's death, the Company shall pay the Executive in a lump sum the aggregate value of the non-qualified deferred compensation that the Company otherwise would have paid the Executive prior to that date under Section 4.e.
 - iv. If any amount to be paid to the Executive pursuant to this Agreement is "deferred compensation" subject to Section 409A, then each such payment which is conditioned upon Executive's execution of a release and which is to be paid or provided during a designated period that begins in one taxable year and ends in a second taxable year, shall be paid or provided in the later of the two taxable years.
 - v. It is intended that each installment of the payments and benefits provided under Section 4.e. shall be treated as a separate "payment" for purposes of Section 409A.
 - vi. Neither the Company nor the Executive shall have the right to accelerate or defer the delivery of any such payments or benefits except to the extent specifically permitted or required by Section 409A.
 - vii. Notwithstanding any other provision of this Agreement to the contrary, in the event of any ambiguity in the terms of this Agreement, such term(s) shall be interpreted and at all times administered in a manner that avoids the inclusion of compensation in income under Section 409A, or the payment of increased taxes, excise taxes or other penalties under Section 409A.
- c. The parties intend this Agreement to be in compliance with Section 409A. Executive acknowledges and agrees that Company does not guarantee the tax treatment or tax consequences associated with any payment or benefit arising under this Agreement, including but not limited to consequences related to Section 409A.
 - d. If any payment or benefit the Executive would receive under this Agreement, when combined with any other payment or benefit Executive receives pursuant to a Change of Control (whether under this Agreement or otherwise) (such payment or benefit, for purposes of this section, a "Payment") would: (i) constitute a "parachute payment" within the meaning of Section 280G of the Code; and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of

the Code (the "Excise Tax"), then such Payment shall be either: (A) the full amount of such Payment; or (B) such lesser amount as would result in no portion of the Payment being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local employment taxes, income taxes, and the Excise Tax, results in Executive's receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. The Payments will be reduced in the following order: (A) reduction of any cash severance payments otherwise payable to the Executive that are exempt from Section 409A of the Code; (B) reduction of any other cash payments or benefits otherwise payable to the Executive that are exempt from Section 409A of the Code, but excluding any payments attributable to any acceleration of vesting or payments with respect to any equity awards that are exempt from Section 409A of the Code; (C) reduction of any other payments or benefits otherwise payable to the Executive on a pro-rata basis or such other manner that complies with Section 409A of the Code, but excluding any payments attributable to any acceleration of vesting and payments with respect to any equity awards that are exempt from Section 409A of the Code; and (D) reduction of any payments attributable to any acceleration of vesting or payments with respect to any equity awards that are exempt from Section 409A of the Code, in each case beginning with payments that would otherwise be made last in time.

11. **Validity.** The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

12. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together shall constitute the same instrument.

13. **Entire Agreement; Prior Agreements.** This Agreement and the Side Letter Agreement between the Company and the Executive dated as of the Effective Date together constitute the entire agreement among the parties with respect to the subject matter hereof and, unless otherwise provided herein, supersede all prior agreements, negotiations or understandings, written or oral, in respect thereof, including without limitation that certain offer letter agreement dated April 9, 2020 from the Company to the Executive.

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DICERNA PHARMACEUTICALS, INC.

Date: 04/24/2020 /s/ Douglas Fambrough III, Ph.D.
By: Douglas Fambrough III, Ph.D.

Its: President and CEO

Date: 04/22/2020 /s/ Douglas Pagán
Douglas Pagán



Dicerna Announces First Quarter 2020 Financial Results and Provides a Business Update

— Company Continues to Advance Ongoing Nedosiran, DCR-A1AT and RG6346 Clinical Trials —

— Company Well Capitalized With \$706.9 Million in Cash, Cash Equivalents and Marketable Securities as of March 31, 2020 —

— Management to Host Conference Call Today at 4:30 p.m. ET —

LEXINGTON, Mass., May 7, 2020 – Dicerna Pharmaceuticals, Inc. (Nasdaq: DRNA) (the “Company” or “Dicerna”), a leading developer of investigational ribonucleic acid interference (RNAi) therapeutics, today reported its financial results for the first quarter ended March 31, 2020.

“COVID-19 has undeniably impacted nearly every facet of life, including drug development. Despite the significant challenges the pandemic has presented for employees, participants in ongoing clinical studies, families and caregivers, and patient communities, we continued to make meaningful progress across our business in the first quarter thanks in large part to the dedication and adaptability of our employees,” said Douglas Fambrough, Ph.D., president and chief executive officer of Dicerna. “While COVID-19 has resulted in slower enrollment in our clinical trials, we have nonetheless been able to execute on every front within our immediate control and have been putting in place measures that we believe should help to mitigate the potential for any protracted effects from trial adjustments to allow us to rapidly move forward on a clinical level as restrictions are lifted and it is safe to do so.

“Among our recent achievements, we met our objective to deliver an overview of the positive early observations from our PHYOX™³ long-term, multidose trial of nedosiran, our lead product candidate in development for treatment of primary hyperoxaluria, or PH, types 1, 2 and 3,” Dr. Fambrough continued. “We also entered into two agreements with Alnylam in early April – the first of which enhances our confidence to bring nedosiran to market upon approval and will enable us to earn meaningful royalties on product sales of Alnylam’s PH type 1 product candidate post-approval; and the second of which provides us with another treatment candidate to evaluate for alpha-1 antitrypsin deficiency-associated liver disease, enhancing our opportunity to advance a new therapy that we believe has the greatest potential to benefit patients. We continue our efforts to steadily screen patients for enrollment in our PHYOX² pivotal trial of nedosiran, and RG6346, our Phase 1 candidate for HBV that we are developing in collaboration with Roche, continues to progress toward enrollment completion. We are looking forward to presenting data from across our core development pipeline and platform at our upcoming R&D Day in August.

“While the COVID-19 situation and its future impacts remain uncertain on a macro level, at a corporate level, this global health crisis is bringing into focus the strengths of Dicerna’s business model and the critical importance of innovative biotechnology to protecting and addressing public health. Our balance sheet is strong, and we have the capital on hand to appropriately resource each of the key functions necessary to execute on our goals, positioning us well as we continue our evolution toward becoming a fully integrated, commercial-stage biopharmaceutical company,” Dr. Fambrough concluded.

Recent Events

- **Douglas Pagán to Become Chief Financial Officer.** In a separate news release issued today, Dicerna announced that Douglas Pagán will succeed Jack Green who is retiring as Dicerna’s chief financial officer. Mr. Pagán will begin his new role with the Company on May 26, 2020.
- **Roche Nominates First Selected GalXC™ Target.** Dicerna today announced that Roche has formally nominated the first selected target and thus has initiated the research and development portion of its agreement with the Company. In October 2019, Dicerna and Roche entered into an agreement related to the development and commercialization of RG6346 and the discovery, development and commercialization of oligonucleotide therapeutics targeting multiple gene targets implicated in chronic hepatitis B virus (HBV) infection.

- **Dicerna and Alnylam Pharmaceuticals, Inc. Complete Cross-License Agreement for Primary Hyperoxaluria Programs and Form RNAi Therapeutics Collaboration on Alpha-1 Antitrypsin Deficiency-Associated Liver Disease.** In April 2020, Dicerna and Alnylam Pharmaceuticals, Inc. (“Alnylam”) completed a cross-license of their respective intellectual property for Alnylam’s lumasiran and Dicerna’s nedosiran investigational programs for the treatment of PH. The cross-license agreement provides for Alnylam to pay mid- to high-single-digit royalties to Dicerna based on global net sales of lumasiran and for Dicerna to pay low-single-digit royalties to Alnylam on global net sales of nedosiran.

Dicerna and Alnylam also announced the formation of a development and commercialization collaboration for the treatment of alpha-1 antitrypsin (“A1AT”) deficiency-associated liver disease. Under the agreement, Dicerna will evaluate Alnylam’s ALN-AAT02 as well as Dicerna’s DCR-A1AT, each investigational RNAi therapeutics in Phase 1/2 development for treatment of A1AT deficiency-associated liver disease, and Dicerna will select which product candidate to advance into pivotal development. At the completion of Phase 3, Alnylam may opt in to commercialize the selected candidate in countries outside the U.S.

- **Initial Observations From PHYOX3 Trial of Nedosiran for Treatment of Primary Hyperoxaluria Announced.** In March, Dicerna announced results from an interim analysis of the PHYOX3 long-term, multidose, open-label rollover extension trial of nedosiran. As of the March 2020 preliminary analysis:
 - 14 participants from the completed single-dose PHYOX1 Phase 1 clinical trial had enrolled in the PHYOX3 trial;
 - Four patients had received at least three monthly doses of nedosiran delivered subcutaneously; all four patients who received at least three monthly doses of nedosiran achieved normalization or near-normalization of urinary oxalate levels on at least two visits;
 - Nedosiran appeared generally well tolerated, with an overall adverse event profile comparable to that observed in the PHYOX1 Phase 1 clinical trial;
 - Based on the cumulative number of days patients had participated in the PHYOX3 trial, total patient exposure to monthly dosing of nedosiran delivered subcutaneously had reached nearly two years, and the longest-treated patient in the PHYOX3 trial had received seven monthly doses of nedosiran as of the interim analysis.

Due to the further postponement of the OxalEurope meeting to Dec. 1, 2020, the Company expects to first present multidose results from the PHYOX3 trial at its R&D Day planned for August 2020.

- **Orphan Drug Designation for DCR-A1AT.** In March, the U.S. Food and Drug Administration (FDA) granted orphan drug designation (ODD) to Dicerna’s DCR-A1AT for the treatment of A1AT deficiency.
- **Eli Lilly & Company Selects Second Dicerna Molecule for Preclinical Evaluation.** During the first quarter of 2020, Eli Lilly & Company (“Lilly”) selected LY3819469, a GalXC molecule for the second collaboration target in cardiometabolic disease, for advancement into preclinical development.

Clinical and Supply Chain Updates

In March, the Company provided a business and clinical development milestones update related to the COVID-19 pandemic. Given the fluid nature of the COVID-19 pandemic, the evolving and extraordinary actions undertaken by clinical trial sites globally, and the variable and uncertain pace at which clinical sites and territories may return to more conventional operations, Dicerna continues to evaluate the plans and timing related to its ongoing clinical development programs.

- **Nedosiran PHYOX Clinical Development Program**
 - **PHYOX2:** Enrollment in the PHYOX2 trial continues at a limited number of sites globally. As planned, Dicerna is implementing the necessary protocol amendments and is working closely with local Institutional Review Boards (IRBs) to facilitate the transition of certain site visits to a combination of at-home nurse visits with investigator telehealth assessments for drug administration and safety follow-up in the PHYOX2 trial. Patients continue to be screened for potential enrollment in the PHYOX2 trial, as feasible.
 - **PHYOX3:** As of April 2020, the Company had implemented a protocol amendment with local IRBs and had transitioned certain site visits to a combination of at-home nurse visits with investigator telehealth assessments for dose administration and safety follow-up. Patients have continued to enroll in the PHYOX3 trial, and as of May 4, 2020, 17 patients had enrolled in the study.

The Company plans to provide revised timing estimates for PHYOX2 enrollment completion and initiation of additional planned PHYOX trials at a later date and will continue to evaluate potential effects on timing of additional activities, such as the nedosiran New Drug Application submission.

- **DCR-A1AT Phase 1/2 Trial Update**

Following our business update in March 2020, enrollment of healthy volunteers in the Phase 1/2 trial of DCR-A1AT was effectively paused due to site restrictions related to the COVID-19 pandemic. All subjects in the current dosing cohort are expected to complete their remaining visits, as feasible. As of late April, the Scientific Review Committee for the DCR-A1AT Phase 1/2 trial confirmed that the study could continue and begin enrolling healthy volunteers in the next dosing cohort. Additional safety precautions will be implemented, including testing of any participants who present with symptoms consistent with COVID-19. The Company expects that participants will begin enrolling in the next dosing cohort in the next few weeks. Completion of dosing in healthy volunteers in the single-ascending-dose cohorts and initiation of dosing in patients in the Phase 1/2 trial of DCR-A1AT will be determined based on the timing and pace of enrollment, further developments in the COVID-19 pandemic, as well as the Company's evaluation of next steps for the ALN-AAT02 and DCR-A1AT programs under the agreement with Alnylam.

- **RG6346 Phase 1 Proof-of-Concept Trial for Hepatitis B Virus Infection**

The Phase 1 clinical trial of RG6346 for the treatment of chronic HBV infection continues to progress. Dicerna continues to expect to present preliminary Phase 1 proof-of-concept data from all existing cohorts at the Company's R&D Day in August 2020.

- **Supply Chain**

Supply of Dicerna's investigational medicines is sufficient to support ongoing clinical trials. Based on current evaluations, Dicerna's supply chains continue to appear intact at this time to meet the Company's foreseeable 2020 clinical, nonclinical and chemistry, manufacturing and control (CMC) supply demands across all programs. The Company has undertaken efforts to mitigate potential future impacts to the supply chain by increasing its stock of critical starting materials required to meet the needs of the Company and its collaborative partners through mid-2021 and by identifying and engaging alternative suppliers. The Company continues to be alert to the potential for disruptions that could arise from COVID-19 and remains in close contact with suppliers.

Expected Upcoming Milestones and Events

- **R&D Day and Corporate Update** – August 2020
 - **Nedosiran:** Interim multidose data from PHYOX3 open-label clinical trial
 - **RG6346:** Preliminary Phase 1 proof-of-concept data from all existing cohorts
 - **GalXC:** Present data for extending GalXC technology to additional tissues
- **Nedosiran:** Updated multidose data from PHYOX3 open-label clinical trial – OxalEurope Meeting, Dec. 1, 2020
- **Collaborative Program:** Investigational New Drug or Clinical Trial Authorization filing for LY3561774 by Lilly – late 2020

Financial Condition and Operating Results for the First Quarter of 2020

- **Cash Position** – As of March 31, 2020, Dicerna had \$706.9 million in cash, cash equivalents, and held-to-maturity investments, compared to \$348.9 million as of Dec. 31, 2019. Additionally, the Company had \$5.6 million and \$3.9 million of restricted cash equivalents as of March 31, 2020 and Dec. 31, 2019, respectively, reflecting collateral securing the Company's lease obligations.
- **Revenue** – Dicerna recognized \$34.0 million of revenue associated with its collaboration agreements during the quarter ended March 31, 2020, compared to \$3.1 million for the same period in 2019.
- **Research and Development (R&D) Expenses** – R&D expenses were \$43.2 million for the quarter ended March 31, 2020, compared to \$21.6 million for the same period in 2019. The increase was primarily due to direct research and development expenses as a result of manufacturing and clinical study costs and employee-related expenses due to an increase in headcount necessary to support our growth.
- **General and Administrative (G&A) Expenses** – G&A expenses were \$16.0 million for the quarter ended March 31, 2020, compared to \$9.7 million for the same period in 2019. The increase was primarily due to employee-related expenses as a result of increased headcount necessary to support our growth.
- **Net Loss** – Net loss was \$22.5 million, or \$0.31 per share, for the quarter ended March 31, 2020, compared to \$26.2 million, or \$0.38 per share, for the same period in 2019.

Guidance

Dicerna believes that its cash, cash-equivalents and held-to-maturity investments will be sufficient to fund the execution of its current clinical and operating plan into 2023, which includes our expectations to advance nedosiran through pivotal development, regulatory filing and potential commercial launch; completing the proof-of-concept study of RG6346 in participants with HBV infection; conducting nonclinical studies of ALN-AAT02 and advancing either ALN-AAT02 or DCR-A1AT through Phase 1/2; and initiating and conducting research and development programs with our collaborative partners. This estimate assumes no new funding from additional collaboration agreements or from external financing events and no significant unanticipated changes in costs and expenses. Dicerna expects its overall expenses to continue to increase significantly for the foreseeable future, primarily as the Company continues clinical manufacturing activities, advances preclinical toxicology studies, continues clinical activities associated with its lead product candidates, prepares for commercialization of nedosiran and initiates or increases activities under the agreements with Novo Nordisk A/S, Roche, Eli Lilly, Alexion Pharmaceuticals, Inc., Boehringer Ingelheim International GmbH and Alnylam.

Conference Call

Management will host a conference call at 4:30 p.m. ET today to review Dicerna's first quarter 2020 financial results and provide a general business update. The conference call can be accessed by dialing (855) 453-3834 or +1 (484) 756-4306 (international) and referencing conference ID 3780976 prior to the start of the call. The call will also be webcast and will be available under the "Investors & Media" section of the Dicerna website, www.dicerna.com. A replay of the call will be available approximately two hours after the completion of the call and will remain available for seven days. To access the replay, please dial (855) 859-2056 or +1 (404) 537-3406 and refer to conference ID 3780976. The webcast will also be archived on Dicerna's website.

About Dicerna's GalXC™ RNAi Technology Platform

Dicerna's proprietary ribonucleic acid interference (RNAi) technology platform, called GalXC™, aims to advance the development of next-generation RNAi-based therapies designed to silence disease-driving genes in the liver and other body systems. Liver-targeted GalXC-based compounds enable subcutaneous delivery of RNAi therapies that are designed to specifically bind to receptors on liver cells, leading to internalization and access to the RNAi machinery within the cells. The GalXC approach seeks to optimize the activity of the RNAi pathway so that it operates in the most specific and potent fashion. Compounds produced via GalXC are intended to be broadly applicable across multiple therapeutic areas, including both liver and non-liver indications.

About Dicerna Pharmaceuticals, Inc.

Dicerna Pharmaceuticals, Inc. (Nasdaq: DRNA) is a biopharmaceutical company focused on discovering, developing and commercializing medicines that are designed to leverage ribonucleic acid interference (RNAi) to selectively silence genes that cause or contribute to disease. Using our proprietary RNAi technology platform called GalXC™, Dicerna is committed to developing RNAi-based therapies with the potential to treat both rare and more prevalent diseases. By reducing the level of disease-causing genes of the liver, Dicerna's GalXC has the potential to safely target conditions that are difficult to treat with other modalities. Continually innovating, Dicerna is also exploring new applications of RNAi technology beyond the liver, targeting additional tissues and enabling new therapeutic applications. In addition to our own pipeline of core discovery and clinical candidates, Dicerna has established collaborative relationships with some of the world's leading pharmaceutical companies, including Novo Nordisk A/S, Roche, Eli Lilly and Company, Alexion Pharmaceuticals, Inc., Boehringer Ingelheim International GmbH and Alnylam Pharmaceuticals, Inc. Between Dicerna and our collaborative partners, we currently have more than 20 active discovery, preclinical or clinical programs focused on rare, cardiovascular, cardiometabolic, viral, chronic liver and complement-mediated diseases, as well as neurodegeneration and pain. At Dicerna, our mission is to interfere – to silence genes, to fight disease, to restore health. For more information, please visit www.dicerna.com.

Cautionary Note on Forward-Looking Statements

This press release 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) the therapeutic and commercial potential of nedosiran, RG6346, ALN-AAT02, DCR-A1AT and the GalXC™ platform; (ii) clinical development

timelines related to nedosiran, RG6346, ALN-AAT02 and DCR-A1AT, including continued alignment on the regulatory pathway to approval of nedosiran; and research and development plans relating to GalXC internal and partnered programs; (iii) the potential for Dicerna to continue to add programs and expand collaborative work with our liver-targeted GalXC technology and to extend the reach of our GalXC technology to additional tissues in our internal discovery research and in our collaborative programs; (iv) the potential of Dicerna's technology and drug candidates in the Company's research and development pipeline; and (v) Dicerna's financial position, expectations about current or future collaboration funding, expenses and cash runway. The process by which investigational therapies, some of which are early-stage, such as nedosiran, RG6346, DCR-A1AT, our collaborative research and development programs and an early-stage platform such as GalXC could potentially lead to an approved product is long and subject to highly significant risks. Applicable risks and uncertainties include those relating to Dicerna's clinical research and other risks identified under the heading "Risk Factors" included in the Company's most recent filings on Forms 10-K and 10-Q and in other future filings with the Securities and Exchange Commission. These risks and uncertainties include, among others, the cost, timing and results of preclinical studies and clinical trials and other development activities by us and our collaborative partners; the likelihood of Dicerna's clinical programs being executed on timelines provided and reliance on the Company's contract research organizations and predictability of timely enrollment of subjects and patients to advance Dicerna's clinical trials; the reliance of Dicerna on contract manufacturers to supply its products for research and development and the risk of supply interruption from a contract manufacturer; the potential for future data to alter initial and preliminary results of early-stage clinical trials; the impact of the ongoing COVID-19 pandemic on our business operations, including the conduct of our research and development activities; the unpredictability of the duration and results of the regulatory review of Investigational New Drug applications (INDs) and Clinical Trial Applications (CTAs) that are necessary to continue to advance and progress the Company's clinical programs and the regulatory review of INDs and CTAs; the timing, plans and reviews by regulatory authorities of marketing applications such as New Drug Applications (NDAs) and comparable foreign applications for one or more of Dicerna's product candidates; the ability to secure, maintain and realize the intended benefits of collaborations with partners; market acceptance for approved products and innovative therapeutic treatments; competition; the possible impairment of, inability to obtain, and costs to obtain intellectual property rights; possible safety or efficacy concerns that could emerge as new data are generated in R&D; and general business, financial, and accounting risks and litigation. The forward-looking statements contained in this press release reflect Dicerna's current views with respect to future events, and Dicerna does not undertake and specifically disclaims any obligation to update any forward-looking statements.

GalXC™ and PHYOX™ are trademarks of Dicerna Pharmaceuticals, Inc.

(tables follow)

DICERNA PHARMACEUTICALS, INC.

SELECTED FINANCIAL INFORMATION (UNAUDITED)

CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands)

	<u>March 31,</u> <u>2020</u>	<u>December 31,</u> <u>2019</u>
Cash and cash equivalents	\$ 245,479	\$ 152,816
Held-to-maturity investments	461,411	196,065
Contract receivables	15,000	200,354
Prepaid expenses and other current assets	8,606	6,934
Property and equipment, net	7,500	7,076
Right-of-use operating assets, net	29,932	30,102
Restricted cash equivalents	5,563	3,894
Other noncurrent assets	5,298	168
Total Assets	<u>\$ 778,789</u>	<u>\$ 597,409</u>
Accounts payable	\$ 6,497	\$ 6,077
Accrued expenses and other current liabilities	19,087	20,042
Lease liability, current	3,164	3,358
Deferred revenue, current	223,556	212,258
Lease liability, noncurrent	20,518	20,141
Deferred revenue, noncurrent	327,506	182,730
Other noncurrent liabilities	555	608
Total stockholders' equity	177,906	152,195
Total Liabilities and Stockholders' Equity	<u>\$ 778,789</u>	<u>\$ 597,409</u>
Common stock outstanding	73,779	71,573

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
Revenue	\$ 34,028	\$ 3,107
Operating expenses:		
Research and development	43,171	21,603
General and administrative	16,023	9,676
Total operating expenses	59,194	31,279
Loss from operations	(25,166)	(28,172)
Other income (expense):		
Interest income	2,613	2,018
Interest expense	(4)	—
Other income	65	—
Total other income, net	2,674	2,018
Net loss	\$ (22,492)	\$ (26,154)
Net loss per share – basic and diluted	\$ (0.31)	\$ (0.38)
Weighted-average common shares outstanding – basic and diluted	72,919	68,259

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Dicerna To Appoint Douglas Pagán Chief Financial Officer

– Mr. Pagán Brings to Dicerna More Than 20 Years of Biopharmaceutical Financial Management Experience –

LEXINGTON, Mass., May 7, 2020 -- [Dicerna Pharmaceuticals, Inc.](#) (Nasdaq: DRNA) (the “Company” or “Dicerna”), a leading developer of investigational ribonucleic acid interference (RNAi) therapeutics, today announced that Douglas Pagán will become Dicerna’s chief financial officer (CFO) and a member of the Company’s executive leadership team, effective May 26, 2020. Dicerna previously announced the retirement of its current CFO, Jack Green, who will continue with the Company in a consulting capacity to ensure a successful transition.

“I am very pleased to welcome Doug to our management team,” said Douglas Fambrough, Ph.D., president and chief executive officer of Dicerna. “Doug’s broad experience in financial management and strategic planning for companies at all stages of the lifecycle, from early preclinical to post-commercialization, will be invaluable as we build the Company and continue our evolution toward becoming a fully integrated commercial-stage biopharmaceutical company. We sincerely thank Jack Green for his financial leadership since joining the Company as our CFO in 2016 and wish him well in his upcoming retirement.”

“This is an exciting time to join Dicerna as it moves toward commercial readiness for its lead rare disease candidate now in pivotal development while supporting a growing pipeline of proprietary and partnered candidates derived from its unique GalXC™ RNAi technology platform,” said Mr. Pagán. “With near- and long-term growth drivers, a strong balance sheet, and a diversified business model that allows the Company to benefit from the scale and resources of its collaborative relationships while also retaining select therapies for its own advancement, Dicerna presents an attractive mix of strong growth prospects and compelling science. I am looking forward to contributing to Dicerna’s success as part of the executive leadership team.”

Over a career spanning more than two decades in the life sciences industry, Mr. Pagán’s experience includes financial management and capital raising supporting advancement of new therapeutics, product launch and post-commercialization activities, and in- and out-licensing agreements for clinical candidates and commercial products.

Mr. Pagán is currently completing his service as CFO and secretary of KSQ Therapeutics, a privately held biotechnology company, where he is a member of the executive team in charge of finance and various operational functions, with responsibility for board management and corporate governance. Prior to KSQ, Mr. Pagán served for five years as CFO of Paratek Pharmaceuticals, Inc., a publicly traded biopharmaceutical company focused on infectious disease. During his tenure as CFO at Paratek, Mr. Pagán played a key role in transforming Paratek from a development-stage to a commercial-stage company through the launch of the company’s first product, NUZYRA®, for U.S. hospital and community-based sales and distribution, in addition to his responsibilities for finance, investor relations, strategic planning and SEC reporting. Under his financial leadership, Paratek raised more than \$500 million in equity and debt financing.

Prior to Paratek, Mr. Pagán held roles of increasing responsibility at Acceleron Pharma, Inc., Biogen Idec (now Biogen), Bristol-Myers Squibb and Johnson & Johnson. He also worked in the investment banking division at J.P. Morgan Securities early in his career. Mr. Pagán serves on the Board of Directors of Ziopharm Oncology, an immuno-oncology company. He earned an MBA from Columbia Business School and a Bachelor of Science degree in chemical engineering with a concentration in engineering biology from Princeton University.

About Dicerna Pharmaceuticals, Inc.

Dicerna Pharmaceuticals, Inc. (Nasdaq: DRNA) is a biopharmaceutical company focused on discovering, developing and commercializing medicines that are designed to leverage ribonucleic acid interference (RNAi) to selectively silence genes that cause or contribute to disease. Using our proprietary RNAi technology platform called GalXC™, Dicerna is committed to developing RNAi-based therapies with the potential to treat both rare and more prevalent diseases. By reducing the level of disease-causing genes of the liver, Dicerna’s GalXC has the potential to safely target conditions that are difficult to treat with other modalities. Continually innovating, Dicerna is also exploring new applications of RNAi technology beyond the liver, targeting additional tissues and enabling new therapeutic applications. In addition to our own pipeline of core discovery and clinical candidates, Dicerna has established collaborative relationships with some of the world’s leading pharmaceutical companies, including Novo Nordisk A/S, Roche, Eli Lilly and Company, Alexion Pharmaceuticals, Inc., Boehringer Ingelheim International GmbH and Alnylam Pharmaceuticals, Inc. Between Dicerna

and our collaborative partners, we currently have more than 20 active discovery, preclinical or clinical programs focused on rare, cardiovascular, cardiometabolic, viral, chronic liver and complement-mediated diseases, as well as neurodegeneration and pain. At Dicerna, our mission is to interfere – to silence genes, to fight disease, to restore health. For more information, please visit www.dicerna.com.

Cautionary Note on Forward-Looking Statements

This press release includes forward-looking statements relating to the future growth of the Company. 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. Applicable risks and uncertainties include those relating to our preclinical research and clinical programs and other risks identified under the heading "Risk Factors" included in our most recent Form 10-K filing and in other future filings with the Securities and Exchange Commission. The forward-looking statements contained in this press release reflect Dicerna's current views with respect to future events, and Dicerna does not undertake and specifically disclaims any obligation to update any forward-looking statements.

GalXC™ is a trademark of Dicerna Pharmaceuticals, Inc. NUZYRA® is a registered trademark of Paratek Pharmaceuticals, Inc.

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