

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 14, 2021**

**Editas Medicine, Inc.**  
(Exact Name of Registrant as Specified in its Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-37687**  
(Commission File Number)

**46-4097528**  
(IRS Employer Identification No.)

**11 Hurley Street**  
**Cambridge, Massachusetts**  
(Address of Principal Executive Offices)

**02141**  
(Zip Code)

Registrant's telephone number, including area code: **(617) 401-9000**

(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 (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-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, \$0.0001 par value per share	EDIT	The Nasdaq Stock Market LLC

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 May 14, 2021, Editas Medicine, Inc. (the “Company”) entered into a Common Stock Sales Agreement (the “Sales Agreement”) with Cowen and Company, LLC, as agent (“Cowen”), pursuant to which the Company may issue and sell shares of its common stock, \$0.0001 par value per share, having an aggregate offering price of up to \$300,000,000 (the “Shares”), from time to time through Cowen (the “Offering”). Also, on May 14, 2021, the Company is filing a prospectus supplement with the Securities and Exchange Commission in connection with the Offering (the “Prospectus Supplement”) under its existing automatic shelf registration statement, which became effective on March 1, 2021 (File No. 333-253715), and the base prospectus contained therein.

Upon delivery of a placement notice, and subject to the terms and conditions of the Sales Agreement, Cowen may sell the Shares by methods deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended. The Company may sell the Shares in amounts and at times to be determined by the Company from time to time subject to the terms and conditions of the Sales Agreement, but it has no obligation to sell any of the Shares in the Offering.

The Company or Cowen may suspend or terminate the Offering upon notice to the other party and subject to other conditions. Cowen will act as sales agent on a commercially reasonable efforts basis consistent with its normal trading and sales practices and applicable state and federal law, rules and regulations and the rules of The Nasdaq Global Select Market.

The Company has agreed to pay Cowen commissions for its services in acting as agent in the sale of the Shares in the amount of up to 3.0% of gross proceeds from the sale of the Shares pursuant to the Sales Agreement. The Company has also agreed to provide Cowen with customary indemnification and contribution rights.

A copy of the Sales Agreement is attached as Exhibit 1.1 hereto and is incorporated herein by reference. The foregoing description of the material terms of the Sales Agreement does not purport to be complete and is qualified in its entirety by reference to such exhibit.

Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Company, has issued a legal opinion relating to the Shares. A copy of such legal opinion, including the consent included therein, is attached as Exhibit 5.1 hereto.

The Shares are registered pursuant to an effective shelf Registration Statement on Form S-3 (File No. 333-253715) and the base prospectus contained therein, and offerings for the Shares will be made only by means of the Prospectus Supplement. This Current Report on Form 8-K shall not constitute an offer to sell or solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities law of such state or jurisdiction.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">1.1</a>	<a href="#">Common Stock Sales Agreement, dated as of May 14, 2021, by and between the Company and Cowen and Company, LLC</a>
<a href="#">5.1</a>	<a href="#">Opinion of Wilmer Cutler Pickering Hale and Dorr LLP</a>
<a href="#">23.1</a>	<a href="#">Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)</a>
104	The cover page from this Current Report on Form 8-K, formatted in Inline XBRL

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

EDITAS MEDICINE, INC.

Date: May 14, 2021

By: /s/ Michelle Robertson

Michelle Robertson

Chief Financial Officer

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Editas Medicine, Inc.

\$300,000,000

**COMMON STOCK**  
**SALES AGREEMENT**

May 14, 2021

Cowen and Company, LLC  
599 Lexington Avenue  
New York, NY 10022

Ladies and Gentlemen:

Editas Medicine, Inc., a Delaware corporation (the "**Company**"), confirms its agreement (this "**Agreement**") with Cowen and Company, LLC ("**Cowen**"), as follows:

1. **Issuance and Sale of Shares.** The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein and any Terms Agreement (defined below), it may issue and sell to or through Cowen, acting as agent and/or principal, shares (the "**Shares**") of the Company's common stock, par value \$0.0001 per share (the "**Common Stock**"), having an aggregate offering price of up to \$300,000,000. Notwithstanding anything to the contrary contained herein, the parties hereto agree that compliance with the limitation set forth in this **Section 1** on the number of shares of Common Stock issued and sold under this Agreement and any Terms Agreement shall be the sole responsibility of the Company, and Cowen shall have no obligation in connection with such compliance. The issuance and sale of Common Stock through Cowen will be effected pursuant to the Registration Statement (as defined below) filed by the Company with the Securities and Exchange Commission (the "**Commission**"), although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement (as defined below) to issue the Common Stock.

The Company has filed, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "**Securities Act**"), with the Commission a registration statement on Form S-3 (File No. 333-253715), including a base prospectus (the "**Base Prospectus**"), relating to certain securities, including the Common Stock, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "**Exchange Act**"). The Company has prepared a prospectus specifically relating to the Shares supplemental to the Base Prospectus (the "**Prospectus Supplement**") and included as part of such registration statement. The Company has furnished to Cowen, for use by Cowen, copies of the Base Prospectus included as part of such registration statement, as supplemented by the Prospectus Supplement, relating to the Shares. Except where the context otherwise requires, such registration statement, as amended when it became effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B of the Securities Act, is herein called the "**Registration Statement**." The Base Prospectus, including all documents incorporated therein by reference, included in the Registration Statement, as it may be supplemented by the Prospectus Supplement, in the form in which such Base Prospectus and/or Prospectus Supplement have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act, together with any "issuer free writing prospectus," as defined in Rule 433 of the Securities Act ("**Rule 433**"), relating to the Shares that (i) is consented to by Cowen (including any free writing prospectus prepared by the Company solely for use in connection with the offering contemplated by a particular Terms Agreement), hereinafter referred to as a "**Permitted Free Writing Prospectus**," (ii) is required to be filed with the Commission by the Company or (iii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g), is herein called the "**Prospectus**." Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement thereto shall be deemed to include any copy filed with the Commission pursuant to the Electronic Data Gathering Analysis and Retrieval System or any successor thereto (collectively "**EDGAR**").

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2. Agency and Principal Transactions.

(a) Each time that the Company wishes to issue and sell the Shares hereunder through Cowen, acting as agent (each, an “**Agency Transaction**”), it will notify Cowen by email notice (or other method mutually agreed to in writing by the parties) (a “**Placement Notice**”) containing the parameters in accordance with which it desires the Shares to be sold, which shall at a minimum include the number of Shares to be issued, the time period during which sales are requested to be made, any limitation on the number of Shares that may be sold in any one Trading Day (as defined in Section 3) and any minimum price below which sales may not be made, a form of which containing such minimum sales parameters necessary is attached hereto as **Schedule 1**. The Placement Notice shall originate from any of the individuals from the Company set forth on **Schedule 2** (with a copy to each of the other individuals from the Company listed on such schedule), and shall be addressed to each of the individuals from Cowen set forth on **Schedule 2**, as such **Schedule 2** may be amended from time to time. The Placement Notice shall be effective upon receipt by Cowen unless and until (i) in accordance with the notice requirements set forth in Section 4, Cowen declines to accept the terms contained therein for any reason, in its sole discretion, (ii) the entire amount of the Shares thereunder have been sold, (iii) in accordance with the notice requirements set forth in Section 4, the Company suspends or terminates the Placement Notice for any reason in its sole discretion, (iv) the Company issues a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice, or (v) this Agreement has been terminated under the provisions of **Section 11**. The amount of any discount, commission or other compensation to be paid by the Company to Cowen in connection with the sale of the Shares shall be calculated in accordance with the terms set forth in **Schedule 3**. It is expressly acknowledged and agreed that neither the Company nor Cowen will have any obligation whatsoever with respect to an Agency Transaction or any Shares unless and until the Company delivers a Placement Notice to Cowen and Cowen does not decline such Placement Notice pursuant to the terms set forth above, and then only upon the terms specified therein and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice, the terms of the Placement Notice will control.

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(b) The Company may also offer to sell the Shares directly to Cowen, as principal, in which event such parties shall enter into a separate agreement (each, a “**Terms Agreement**”) in substantially the form of **Schedule 2(b)** hereto (with such changes thereto as may be agreed upon by the Company and Cowen), relating to such sale in accordance with Section 3(b) hereof (each such transaction being referred to as a “**Principal Transaction**”).

3. Sale of Shares by Cowen.

(a) Subject to the terms and conditions herein set forth, upon the Company’s delivery of a Placement Notice with respect to an Agency Transaction, and unless the sale of the Shares described therein has been declined, suspended, or otherwise terminated in accordance with the terms of this Agreement, Cowen, for the period specified in the Placement Notice, will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of The Nasdaq Stock Market LLC (“**Nasdaq**”) to sell such Shares up to the amount specified in such Placement Notice, and otherwise in accordance with the terms of such Placement Notice. Cowen will provide written confirmation to the Company (including by email correspondence to each of the individuals of the Company set forth on **Schedule 2**, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) no later than the opening of the Trading Day (as defined below) immediately following the Trading Day on which it has made sales of Shares hereunder setting forth the number of Shares sold on such day, the volume-weighted average price of the Shares sold, and the Net Proceeds (as defined below) payable to the Company. In the event the Company engages Cowen for a sale of Shares in an Agency Transaction that would constitute a “block” within the meaning of Rule 10b-18(a)(5) under the Exchange Act (a “**Block Sale**”), the Company will provide Cowen, at Cowen’s request and upon reasonable advance notice to the Company, on or prior to the Settlement Date, the opinions of counsel, accountant’s letter and officers’ certificates set forth in **Section 8** hereof, each dated the Settlement Date, and such other documents and information as Cowen shall reasonably request. Subject to the terms of a Placement Notice, Cowen may sell Shares by any method permitted by law deemed to be an “at the market offering” as defined in Rule 415 of the Securities Act. Notwithstanding the provisions of **Section 6(k)**, Cowen shall not purchase Shares with respect to an Agency Transaction for its own account as principal unless expressly authorized to do so by the Company in a Placement Notice. The Company acknowledges and agrees that (i) there can be no assurance that Cowen will be successful in selling Shares in an Agency Transaction, and (ii) Cowen will incur no liability or obligation to the Company or any other person or entity if it does not sell Shares in an Agency Transaction for any reason other than a failure by Cowen to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such Shares as required under this **Section 3**. For the purposes hereof, “**Trading Day**” means any day on which the Company’s Common Stock is purchased and sold on the principal market on which the Common Stock is listed or quoted.

(b) (i) If the Company wishes to issue and sell the Shares to Cowen pursuant to this Agreement in a Principal Transaction, it will notify Cowen of the proposed terms of the Principal Transaction. If Cowen, acting as principal, wishes to accept such proposed terms (which it may decline to do for any reason in its sole discretion) or, following discussions with the Company, wishes to accept amended terms, the Company and Cowen shall enter into a Terms Agreement setting forth the terms of such Principal Transaction.

(ii) The terms set forth in a Terms Agreement shall not be binding on the Company or Cowen unless and until the Company and Cowen have each executed and delivered such Terms Agreement accepting all of the terms of such Terms Agreement. In the event of a conflict between the terms of this Agreement and the terms of a Terms Agreement, the terms of such Terms Agreement shall control.

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(iii) Each sale of the Shares to Cowen in a Principal Transaction shall be made in accordance with the terms of this Agreement and a Terms Agreement, which shall provide for the sale of such Shares to, and the purchase thereof by, Cowen. A Terms Agreement may also specify certain provisions relating to the reoffering of such Shares by Cowen. The commitment of Cowen to purchase the Shares pursuant to any Terms Agreement shall be deemed to have been made on the basis of the representations, warranties and agreements of the Company contained, and shall be subject to the terms and conditions set forth, in this Agreement and such Terms Agreement. Any such Terms Agreement shall specify the number of the Shares to be purchased by Cowen pursuant thereto, the price to be paid to the Company for such Shares, any provisions relating to rights of, and default by, Cowen in the reoffering of the Shares, and the time, date (each such time and date being referred to herein as a “**Principal Settlement Date**”) and place of delivery of and payment for such Shares.

(c) Notwithstanding any other provision of this Agreement, the Company shall not offer, sell or deliver, or request the offer or sale, of any Shares pursuant to this Agreement (whether in an Agency Transaction or a Principal Transaction) and, by notice to Cowen given by telephone (confirmed promptly by email), shall cancel any instructions for the offer or sale of any Shares, and Cowen shall not be obligated to offer or sell any Shares, (i) during any period in which the Company is, or could be deemed to be, in possession of material non-public information, or (ii) at any time from and including the date on which the Company shall issue a press release containing, or shall otherwise publicly announce, its earnings, revenues or other results of operations (an “Earnings Announcement”) through and including the time that the Company files a Quarterly Report on Form 10-Q or an Annual Report on Form 10-K that includes consolidated financial statements as of and for the same period or periods, as the case may be, covered by such Earnings Announcement.

#### 4. Suspension of Sales.

(a) The Company or Cowen may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on Schedule 2, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on Schedule 2), suspend any sale of Shares; *provided, however*, that such suspension shall not affect or impair either party’s obligations with respect to any Shares sold hereunder prior to the receipt of such notice. Each of the parties agrees that no such notice under this Section 4 shall be effective against the other unless it is made to one of the individuals named on Schedule 2 hereto, as such schedule may be amended in writing from time to time.

(b) If either Cowen or the Company has reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied with respect to the Common Stock, it shall promptly notify the other party, and Cowen may, at its sole discretion, suspend sales of the Shares under this Agreement.

(c) Notwithstanding any other provision of this Agreement, during any period in which the Registration Statement is no longer effective under the Securities Act, the Company shall promptly notify Cowen, the Company shall not request the sale of any Shares and Cowen shall not be obligated to sell or offer to sell any Shares.

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5. Settlement.

(a) Settlement of Shares. Unless otherwise specified in the applicable Placement Notice, settlement for sales of Shares in an Agency Transaction will occur on the second (2<sup>nd</sup>) Trading Day (or such earlier day as is industry practice for regular-way trading) following the date on which such sales are made (each, an “**Agency Settlement Date**” and the first such Agency Settlement Date, the “**First Delivery Date**”; and any Agency Settlement Date and Principal Settlement Date shall be referred to as a “**Settlement Date**”). The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Shares sold in an Agency Transaction (the “**Net Proceeds**”) will be equal to the aggregate sales price received by Cowen at which such Shares were sold, after deduction for (i) Cowen’s commission, discount or other compensation for such sales payable by the Company pursuant to Section 2 hereof or pursuant to any applicable Terms Agreement, (ii) any other amounts due and payable by the Company to Cowen hereunder pursuant to Section 7(h) (Expenses) hereof, and (iii) any transaction fees imposed by any governmental or self-regulatory organization in respect of such sales. The settlement for sales of Shares in a Principal Transaction will occur on such date against delivery of such proceeds to the Company as is specified in the applicable Terms Agreement.

(b) Delivery of Shares. On or before each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Shares being sold by crediting Cowen’s or its designee’s account (provided Cowen shall have given the Company written notice of such designee at least one Trading Day prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System or by such other means of delivery as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradeable, transferable, registered shares in good deliverable form. On each Settlement Date, Cowen will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. The Company agrees that if the Company, or its transfer agent (if applicable), defaults in its obligation to deliver duly authorized Shares on a Settlement Date through no fault of Cowen, the Company agrees that in addition to and in no way limiting the rights and obligations set forth in Section 9(a) (Indemnification and Contribution— Company Indemnification) hereto, it will (i) hold Cowen harmless against any loss, claim, damage, or reasonable and documented expense (including reasonable and documented legal fees and expenses), as incurred, arising out of or in connection with such default by the Company and (ii) pay to Cowen (without duplication) any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

6. Representations and Warranties of the Company. Except as disclosed in the Registration Statement or the Prospectus, the Company represents and warrants to, and agrees with, Cowen that, unless such representation, warranty or agreement specifies a different time, as of the date of this Agreement and as of each Applicable Time (as defined in Section 20(a)), unless otherwise provided:

(a) Compliance with Registration Requirements. The Company meets the requirements for use of Form S-3 under the Securities Act and is, and has been at all times relevant with respect to the registration of the offer and sale of the Shares, a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act. The Registration Statement became effective upon filing with the Commission. The Company has complied to the Commission’s satisfaction with all requests of the Commission for additional or supplemental information relevant with respect to the registration of the offer and sale of the Shares. No stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or, to the knowledge of the Company, threatened by the Commission. The sale of the Shares hereunder meets the requirements of General Instruction I.B.1 of Form S-3.

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(b) No Misstatement or Omission. (i) Each document, if any, filed or to be filed pursuant to the Exchange Act and incorporated by reference in the Registration Statement or the Prospectus complied or will comply when so filed in all material respects with the Exchange Act and the applicable rules and regulations of the Commission thereunder, (ii) each part of the Registration Statement, when such part became effective, did not contain, and each such part, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (iii) the Registration Statement does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (iv) the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (v) each broadly available road show, if any, when considered together with the Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (vi) as of its date and each Applicable Time, the Prospectus does not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement or the Prospectus based upon any Agent Information. As used herein, “**Time of Sale**” means (i) with respect to each offering of Shares in an Agency Transaction pursuant to this Agreement, the time of Cowen’s initial entry into contracts with purchasers for the sale of such Shares and (ii) with respect to each offering of Shares pursuant to any relevant Terms Agreement, the time of sale of such Shares to Cowen.

(c) Ineligible Issuer Status. The Company is not an “ineligible issuer” in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder.

(d) Exchange Act Compliance. The documents incorporated or deemed to be incorporated by reference in the Prospectus, at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act, and, when read together with the other information in the Prospectus, at the Settlement Dates, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(e) Good Standing of the Company. The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the State of Delaware, has the corporate power and authority to own its property and to conduct its business as described in the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company and its subsidiaries, taken as a whole.

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(f) Good Standing of Subsidiaries. Each subsidiary of the Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has the corporate power and authority to own its property and to conduct its business as described in the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company and its subsidiaries, taken as a whole; all of the issued shares of capital stock of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are owned directly by the Company, free and clear of all liens, encumbrances, equities or claims.

(g) The Sales Agreement; Terms Agreement. This Agreement has been duly authorized, executed and delivered by the Company. Any Terms Agreement will have been duly authorized, executed and delivered by the Company.

(h) Finder's Fee. Except as disclosed in the Prospectus and except as may otherwise exist with respect to Cowen pursuant to this Agreement and any Terms Agreement and any other agreement entered into between the Company and Cowen in connection with the offer and sale of Shares pursuant to this Agreement, there are no contracts, agreements or understandings between the Company and any person that would give rise to a valid claim against the Company or Cowen for a brokerage commission, finder's fee or other like payment in connection with any transactions contemplated by this Agreement.

(i) Authorization of the Common Stock. (i) The authorized capital stock of the Company conforms in all material respects as to legal matters to the description thereof contained in the Registration Statement and the Prospectus; (ii) the shares of Common Stock outstanding on the date of this Agreement and any Terms Agreement have been duly authorized and are validly issued, fully paid and non-assessable, and (iii) the Shares have been duly authorized and, when issued and delivered in accordance with the terms of this Agreement and any Terms Agreement, will be validly issued, fully paid and non-assessable, and the issuance of such Shares will not be subject to any preemptive or similar rights that have not been validly waived.

(j) Ownership of Real Property; Title to Property. As of the date of this Agreement and any Terms Agreement, the Company and its subsidiaries do not own any real property; except as disclosed in the Prospectus, the Company and its subsidiaries will have good and marketable title in fee simple to all real property acquired after the date hereof that is material to the business of the Company and its subsidiaries, taken as a whole. The Company and its subsidiaries have good and marketable title to all personal property owned by them which is material to the business of the Company and its subsidiaries, taken as a whole, in each case free and clear of all liens, encumbrances and defects except such as are described in the Prospectus or such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries, in each case except as described in the Prospectus.

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(k) Absence of Defaults and Conflicts Resulting from Transaction; Absence of Further Requirements. The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement and any Terms Agreement will not contravene any provision of the certificate of incorporation or by-laws of the Company or any agreement or other instrument binding upon the Company or any of its subsidiaries that is material to the Company and its subsidiaries, taken as a whole, or any applicable law or statute or any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or any subsidiary, and no consent, approval, authorization or order of, or qualification with, any governmental body or agency is required for the performance by the Company of its obligations under this Agreement and any Terms Agreement, except such as have already been obtained or made or as may be required by the securities or Blue Sky laws of the various states in connection with the offer and sale of the Shares.

(l) Absence of Existing Defaults and Conflicts. Neither the Company nor any of its subsidiaries is (i) in violation of any provision of its own certificate of incorporation or by-laws, (ii) in default, and, to the knowledge of the Company, no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any agreement or other instrument binding upon the Company or any of its subsidiaries, in either case to the extent that such default has had or would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole, or (iii) in violation of any applicable law or statute or any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or any subsidiary.

(m) Material Adverse Change. There has not occurred any material adverse change, or any development that would reasonably be expected to result in a material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Prospectus.

(n) Legal or Governmental Proceedings. There are no legal or governmental proceedings pending or, to the knowledge of the Company, threatened to which the Company or any of its subsidiaries is a party or to which any of the properties of the Company or any of its subsidiaries is subject (i) other than proceedings accurately described in all material respects in the Prospectus and proceedings that would not have a material adverse effect on the Company and its subsidiaries, taken as a whole, or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by the Prospectus or (ii) that are required to be described in the Registration Statement or the Prospectus and are not so described; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required.

(o) 424(b) Prospectuses. Each preliminary prospectus relating to the offer and sale of the Shares filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder.

(p) Investment Company. The Company is not, and after giving effect to the offering and sale of any of the Shares and the application of the proceeds thereof as described in the Prospectus will not be, required to register as an “investment company” as such term is defined in the Investment Company Act of 1940, as amended (the “**Investment Company Act**”).

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(q) Compliance with Environmental Laws. The Company and its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (“**Environmental Laws**”), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole. There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(r) Clinical Trials. (i) The feasibility, pre-clinical or clinical trials and other studies or tests (x) conducted by or on behalf of or sponsored by the Company or any of its subsidiaries, or (y) in which the Company or any of its subsidiaries has participated, that are described in the Prospectus, or the results of which are referred to in the Prospectus, as applicable, were, and if still pending, are being conducted in all material respects in accordance with standard medical and scientific research standards and procedures for products or product candidates comparable to those being developed by the Company or any of its subsidiaries and all applicable statutes and all applicable rules, regulations and guidance documents of the U.S. Food and Drug Administration (“**FDA**”) and comparable regulatory agencies outside of the United States to which they are subject, including the European Commission and the European Medicines Agency (collectively, the “**Regulatory Authorities**”) and current Good Clinical Practices and Good Laboratory Practices; (ii) the descriptions in the Prospectus of the results of such trials, studies and tests are, in all material respects, accurate and complete descriptions and fairly present the material data derived therefrom; (iii) the Company has no knowledge of any other trials, studies or tests (x) conducted by or on behalf of or sponsored by the Company or any of its subsidiaries, or (y) in which the Company or any of its subsidiaries has participated, not described in the Prospectus, the results of which are materially inconsistent with or raise questions concerning the validity of the results described or referred to in the Prospectus; (iv) the Company and its subsidiaries have operated at all times and are currently in compliance in all material respects with all applicable statutes, rules, regulations, standards, guidelines and orders administered or issued by any Regulatory Authority; and (v) neither the Company nor any of its subsidiaries has received any written notices, correspondence or other communications from the Regulatory Authorities or any court or arbitrator or other governmental or regulatory body, agency or authority requiring or threatening the termination, modification or suspension of any feasibility, clinical or pre-clinical trials or other studies or tests that are described in the Prospectus or the results of which are referred to in the Prospectus, other than ordinary course communications with respect to modifications in connection with the design and implementation of such trials and tests, and there are no reasonable grounds for the same.

(s) Compliance with Regulatory Requirements. Neither the Company nor any of its subsidiaries has failed to file with the Regulatory Authorities any required filing, declaration, listing, registration, report or submission with respect to the Company’s or any subsidiary’s product candidates or feasibility, pre-clinical or clinical trials or other studies or tests that are described or referred to in the Prospectus; all such filings, declarations, listings, registrations, reports or submissions were in compliance in all material respects with applicable laws when filed; and no deficiencies regarding material compliance with applicable law have been asserted by any applicable Regulatory Authority with respect to any such filings, declarations, listings, registrations, reports or submissions.

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(t) Possession of Licenses and Permits. The Company and its subsidiaries possess all licenses, certificates, permits and other authorizations issued by, and have made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses as described in the Prospectus, and neither the Company nor any of its subsidiaries has received notice of any revocation or modification of any such license, certificate, permit or authorization or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course. The Company and its subsidiaries (i) are, and at all times have been, in compliance in all material respects with all statutes, rules, regulations, standards, guidelines and orders administered or issued by any Regulatory Authority or applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, storage, import, export or disposal of any product manufactured or distributed by the Company or any of its subsidiaries (collectively, “**Applicable Laws**”), and (ii) have not received any FDA Form 483, written notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from any court or arbitrator or governmental or regulatory body, agency or authority alleging or asserting non-compliance with (x) any Applicable Laws or (y) any licenses, exemptions, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws. Neither the Company nor any of its subsidiaries has received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory body, agency or authority or third party alleging that any operation or activity is in material violation of any Applicable Laws, and, to the knowledge of the Company, no such notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action is threatened. Neither the Company nor any of its subsidiaries is a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory body, agency or authority. Additionally, to the Company’s knowledge, none of the employees, officers or directors of the Company or any of its subsidiaries has been excluded, suspended or debarred from participation in any U.S. federal health care program, clinical or pre-clinical research or comparable foreign program or is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion.

(u) Status of Material Contracts. Neither the Company nor any of its subsidiaries has sent or received any communication regarding termination of, or intent not to renew, any of the contracts or agreements referred to or described in the Prospectus or filed as an exhibit to the Registration Statement, and no such termination or non-renewal has been threatened by the Company or any of its subsidiaries or, to the Company’s knowledge, any other party to any such contract or agreement, which threat of termination or non-renewal has not been rescinded as of the date hereof.

(v) No Applicable Registration or Other Similar Rights. There are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement, other than any such rights that are described in the Prospectus and have been validly waived in connection with the filing of the Registration Statement and the sale of the Shares.

(w) Statistical and Market-Related Data. Any third-party statistical and market-related data included or incorporated by reference in the Registration Statement or Prospectus are based on or derived from sources that the Company believes to be reliable and accurate.

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(x) Anti-Corruption. (i) Neither the Company nor any of its subsidiaries, nor any director or officer thereof, nor, to the Company's knowledge, any employee or affiliate of the Company or any of its subsidiaries or any agent or representative of the Company or of any of its subsidiaries or affiliates, has taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment, giving or receipt of money, property, gifts or anything else of value, directly or indirectly, to any "government official" (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) ("**Government Official**"), or to any person in violation of any applicable anti-corruption laws; (ii) the Company and its subsidiaries and, to the Company's knowledge, their respective affiliates have conducted their businesses in compliance with applicable anti-corruption laws and have instituted and maintained and will continue to maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (iii) neither the Company nor any of its subsidiaries will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws.

(y) Anti-Money Laundering. The operations of the Company and its subsidiaries are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company and its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Anti-Money Laundering Laws**"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(z) Economic Sanctions. (i) Neither the Company nor any of its subsidiaries, nor any director or officer thereof, nor, to the Company's knowledge, any employee or affiliate of the Company or any of its subsidiaries or any agent or representative of the Company or of any of its subsidiaries or affiliates is an individual or entity ("**Person**") that is, or is owned or controlled by one or more Persons that are:

(A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control ("**OFAC**"), the United Nations Security Council ("**UNSC**"), the European Union ("**EU**"), Her Majesty's Treasury ("**HMT**"), or other relevant sanctions authority (collectively, "**Sanctions**"), or

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(B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, the Crimea region, Cuba, Iran, North Korea and Syria).

(ii) The Company will not, directly or indirectly, use the Net Proceeds of the sale of the Shares, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person:

(A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or

(B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) Since the Company's inception, the Company (including its predecessors) and its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions, except as otherwise authorized by law.

(aa) No Liabilities, Repurchases or Material Changes. Subsequent to the date as of which information is given in the Prospectus, (i) the Company and its subsidiaries have not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock other than purchases of restricted common stock of the Company, which are individually and in the aggregate immaterial to the Company, pursuant to contractual rights of the Company in connection with the termination of the employment with the Company of the holders thereof, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company and its subsidiaries, except in each case as described in the Prospectus.

(bb) Intellectual Property. Except as described in the Prospectus, the Company and its subsidiaries own or possess, or believe they can acquire on commercially reasonable terms, adequate rights to use all patents, patent rights, licenses, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names, domain names and other similar intellectual property or proprietary rights (including all registrations and applications for registration of, and all goodwill associated with, the foregoing) (collectively, "Intellectual Property"), in each case necessary for the conduct of the business of the Company and its subsidiaries in all material respects as currently conducted and as proposed to be conducted as described in the Prospectus. Except as described in the Prospectus and to the knowledge of the Company, neither the Company nor any of its subsidiaries has infringed, misappropriated or otherwise violated any Intellectual Property of any third party in any material respect. Except as described in the Prospectus, neither the Company nor any of its subsidiaries has received any written notice of infringement, misappropriation or other violation of, or conflict with, any Intellectual Property of any third party, or any written notice challenging the validity, enforceability or scope of any Intellectual Property owned by, or exclusively licensed to, the Company or any of its subsidiaries, in each case, which, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a material adverse effect on the Company and its subsidiaries, taken as a whole. To the knowledge of the Company, all material Intellectual Property owned by, or exclusively licensed to, the Company and its subsidiaries is valid and enforceable.

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(cc) Cybersecurity and Data Privacy. (i)(x) To the knowledge of the Company, there has been no (A) security breach, (B) unauthorized destruction, loss, distribution, use, access, disablement or modification, or (C) misappropriation or other compromise or misuse (each of the foregoing subsections (A)-(C), a “**Breach**”) of or relating to any of the Company’s or its subsidiaries’ respective information technology or computer systems, networks, hardware, software, data (including Personal Data (as defined below) and the data of its customers, employees, suppliers, vendors and any third party data maintained by or on behalf of the Company or any of its subsidiaries), equipment or technology (collectively, the “**IT Systems and Data**”) and (y) neither the Company nor any of its subsidiaries has been notified of, or has any knowledge of, any event or condition that would reasonably be expected to result in, any Breach of the IT Systems and Data, except as would not, in the case of this clause (i), individually or in the aggregate, have a material adverse effect; (ii) the Company and each of its subsidiaries has complied, and is presently in compliance, with all (A) applicable laws and statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority and (B) internal and external-facing policies and (C) contractual obligations, in each case relating to (x) the collection, use, transfer, import, export, storage, protection, disposal and/or disclosure of personally identifiable, household, confidential or regulated data or information (“**Data Security Obligations**”, and such data and information, “**Personal Data**”), (y) the privacy and security of the IT Systems and Data or (z) the protection of the IT Systems and Data from any Breach, except as would not, in the case of this clause (ii), individually or in the aggregate, have a material adverse effect; (iii) the Company and each of its subsidiaries has taken commercially reasonable steps to protect the IT Systems and Data, including by establishing, maintaining, implementing and complying with reasonable information technology, information security, cyber security and data protection controls, policies and procedures and technology, including oversight, access controls, encryption, technological and physical safeguards and business continuity/disaster recovery and security plans, that the Company reasonably believes are consistent with industry standards and practices and are designed to protect against and prevent any Breach of the IT Systems and Data; (iv) neither the Company nor any of its subsidiaries has received any complaint regarding any non-compliance with any Data Security Obligation by the Company or any of its subsidiaries; and (v) there is no action, suit or proceeding by or before any court or governmental agency, authority or body pending or, to the knowledge of the Company, threatened alleging non-compliance with any Data Security Obligation by the Company or any of its subsidiaries.

(dd) Absence of Labor Dispute. No material labor dispute with the employees of the Company or any of its subsidiaries exists, except as described in the Prospectus, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would reasonably be likely to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(ee) Insurance. The Company and each of its subsidiaries is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are, in the reasonable judgment of the Company, prudent and customary in the business in which it is engaged; neither the Company nor any of its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a material adverse effect on the Company and its subsidiaries, taken as a whole, except as described in the Prospectus.

(ff) Accounting Controls and Procedures. The Company and each of its subsidiaries maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with United States generally accepted accounting principles (“**U.S. GAAP**”) and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement is accurate. Except as described in the Prospectus, since the end of the Company’s most recent audited fiscal year, there has been (i) no material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (ii) no change in the Company’s internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting.

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(gg) eXtensible Business Reporting Language. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(hh) Taxes. The Company and each of its subsidiaries has filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement and any Terms Agreement or has requested extensions thereof (except where the failure to file would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole) and has paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole, or, except as currently being contested in good faith and for which reserves required by U.S. GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company or any of its subsidiaries which has had (nor does the Company or any of its subsidiaries have any notice or knowledge of any tax deficiency which could reasonably be expected to be determined adversely to the Company or its subsidiaries and which would reasonably be expected to have), individually or in the aggregate, a material adverse effect on the Company and its subsidiaries, taken as a whole.

(ii) Independent Accountants. Ernst & Young LLP, who have certified certain financial statements of the Company, is an independent registered public accounting firm with respect to the Company within the meaning of the Securities Act and the applicable rules and regulations thereunder adopted by the Commission and the Public Company Accounting Oversight Board (United States).

(jj) No Reliance. The Company has not relied upon Cowen or legal counsel for Cowen for any legal, tax or accounting advice in connection with the offering and sale of the Shares.

(kk) Cowen Purchases. The Company acknowledges and agrees that Cowen has informed the Company that Cowen may, to the extent permitted under the Securities Act and the Exchange Act, purchase and sell shares of Common Stock for its own account while this Agreement is in effect, *provided, that* (i) no such purchase or sale shall take place while a Placement Notice is in effect (except to the extent Cowen may engage in sales of Shares purchased or deemed purchased from the Company as a "riskless principal" or in a similar capacity) and (ii) the Company shall not be deemed to have authorized or consented to any such purchases or sales by Cowen.

Any certificate signed by an officer of the Company and delivered to Cowen or to counsel for Cowen pursuant to or in connection with this Agreement or any Terms Agreement shall be deemed to be a representation and warranty by the Company, as applicable, to Cowen as to the matters set forth therein.

The Company acknowledges that Cowen and, for purposes of the opinions to be delivered pursuant to Section 7 hereof, counsel to the Company and counsel to Cowen, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

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7. Covenants of the Company. The Company covenants and agrees with Cowen that:

(a) Registration Statement Amendments. After the date of this Agreement and during any period in which a Prospectus relating to any Shares is required to be delivered by Cowen under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule), (i) the Company will notify Cowen promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus, other than documents incorporated by reference, has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or for additional information, (ii) the Company will prepare and file with the Commission, promptly upon Cowen's reasonable request, any amendments or supplements to the Registration Statement or Prospectus that, in Cowen's reasonable opinion, may be necessary or advisable in connection with the distribution of the Shares by Cowen (*provided, however*, that the failure of Cowen to make such request shall not relieve the Company of any obligation or liability hereunder, or affect Cowen's right to rely on the representations and warranties made by the Company in this Agreement or any Terms Agreement) and *provided, further*, that the only remedy Cowen shall have with respect to the failure by the Company to make such filing (other than Cowen's rights under Section 9 hereof) will be to cease making sales under this Agreement until such amendment or supplement is filed; (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus, other than documents incorporated by reference, relating to the Shares or a security convertible into the Shares unless a copy thereof has been submitted to Cowen within a reasonable period of time before the filing and Cowen has not reasonably objected thereto (*provided, however*, that the failure of Cowen to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect Cowen's right to rely on the representations and warranties made by the Company in this Agreement and *provided, further*, that the only remedy Cowen shall have with respect to the failure to make such filing (other than Cowen's rights under Section 9 hereof) will be to cease making sales under this Agreement) and the Company will furnish to Cowen at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via EDGAR; (iv) the Company will cause each amendment or supplement to the Prospectus, other than documents incorporated by reference, to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act; and (v) prior to the termination of this Agreement, the Company will notify Cowen if at any time the Registration Statement shall no longer be effective as a result of the passage of time pursuant to Rule 415 under the Securities Act, due to the Company no longer qualifying as a "well-known seasoned issuer" pursuant to Rule 405 and Form S-3 or otherwise.

(b) Notice of Commission Stop Orders. The Company will advise Cowen, promptly after it receives notice or obtains knowledge thereof, of the issuance or threatened issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, of the suspension of the qualification of the Shares for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and it will promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued.

(c) Delivery of Prospectus; Subsequent Changes. During any period in which a Prospectus relating to the Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale of the Shares, (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule), the Company will use its commercially reasonable efforts to comply with all requirements imposed upon it by the Securities Act, as from time to time in force, and to file on or before their respective due dates (taking into account any extensions available under the Exchange Act) all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, 15(d) or any other provision of or under the Exchange Act. If during such period any event occurs as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend or supplement the Registration Statement or Prospectus to comply with the Securities Act, the Company will promptly notify Cowen to suspend the offering of Shares during such period and the Company will promptly amend or supplement the Registration Statement or Prospectus (at the expense of the Company) so as to correct such statement or omission or effect such compliance; *provided, however*, that the Company may delay the filing of any amendment or supplement, if in the judgment of the Company, it is in the best interest of the Company to do so.

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(d) Listing of Shares. During any period in which the Prospectus relating to the Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale of the Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule), the Company will use its commercially reasonable efforts to cause the Shares to be listed on Nasdaq.

(e) Delivery of Registration Statement and Prospectus. The Company will furnish to Cowen and its counsel (at the expense of the Company) copies of the Registration Statement, the Prospectus (including all documents incorporated by reference therein) and all amendments and supplements to the Registration Statement or Prospectus that are filed with the Commission during any period in which a Prospectus relating to the Shares is required to be delivered under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities as Cowen may from time to time reasonably request and, at Cowen's request, will also furnish copies of the Prospectus to each exchange or market on which sales of the Shares may be made; *provided, however*, that the Company shall not be required to furnish any document (other than the Prospectus) to Cowen to the extent such document is available on EDGAR.

(f) Blue Sky Laws. The Company shall endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions in the United States as Cowen shall reasonably request and to continue such qualifications as in effect so long as required for the distribution of the Shares; *provided* that in connection therewith the Company shall not be required to qualify as a foreign corporation or dealer in securities or to file a general consent to service of process in any jurisdiction.

(g) Earnings Statement. The Company will make generally available to the Company's security holders and to Cowen, via a filing on EDGAR, as soon as practicable an earnings statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) and Rule 158 of the Securities Act.

(h) Expenses. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, in accordance with the provisions of Section 11 hereunder, will pay all expenses incident to the performance of its obligations hereunder, including, but not limited to, expenses relating to (i) the preparation, printing and filing of the Registration Statement and each amendment and supplement thereto, of each Prospectus and Prospectus Supplement and of each amendment and supplement thereto, (ii) the preparation, issuance and delivery of the Shares, (iii) the qualification of the Shares under securities laws in accordance with the provisions of Section 7(f) of this Agreement, including filing fees (provided, however, that any fees or disbursements of counsel for Cowen in connection therewith shall be paid by Cowen except as set forth in (viii) below), (iv) the printing and delivery to Cowen of copies of the Prospectus and any amendments or supplements thereto, and of this Agreement and any Terms Agreement, (v) the fees and expenses incurred in connection with the listing or qualification of the Shares for trading on Nasdaq, (vi) transfer taxes imposed on the issuance of Shares, (vii) the costs and charges of any transfer agent, registrar or depository, (viii) filing fees and expenses, if any, of the Commission and the FINRA Corporate Financing Department (including, with respect to any required review by FINRA, the reasonable fees and expenses of Cowen's counsel in an amount not to exceed \$10,000), (ix) the fees and disbursements of Cowen's counsel in an amount not to exceed \$50,000, and (x) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section.

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(i) Use of Proceeds. The Company will use the Net Proceeds as described in the Prospectus in the section entitled “Use of Proceeds.”

(j) Notice of Other Sales. During the pendency of any Placement Notice given hereunder, and for 5 trading days following the termination of any Placement Notice given hereunder, the Company shall provide Cowen notice as promptly as reasonably possible before it offers to sell, contracts to sell, sells, grants any option to sell or otherwise disposes of any shares of Common Stock (other than Shares offered pursuant to the provisions of this Agreement or any Terms Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire Common Stock; provided, that such notice shall not be required in connection with the (i) issuance, grant or sale of Common Stock, options to purchase shares of Common Stock or Common Stock issuable upon the exercise of options or other equity awards pursuant to any stock option, stock bonus or other stock plan or arrangement described in the Prospectus, (ii) the issuance of securities in connection with an acquisition, merger or sale or purchase of assets; (iii) the issuance or sale of Common Stock pursuant to any dividend reinvestment plan that the Company may adopt from time to time provided the implementation of such is disclosed to Cowen in advance; (iv) the issuance of securities in satisfaction of contractual payment obligations described in the Prospectus, including the issuance of Common Stock in payment of indebtedness of the Company in accordance with the terms thereof; (v) the issuance of any shares of common stock issuable upon the exchange, conversion or redemption of securities or the exercise of warrants, options or other rights in effect or outstanding or described in the Prospectus; or (vi) the issuance of any shares of common stock, or securities convertible into or exercisable for common stock, offered and sold in a privately negotiated transaction to licensors, vendors, customers, investors, strategic partners or potential strategic partners and otherwise conducted in a manner so as not to be integrated with the offering of Shares contemplated hereby. Notwithstanding the foregoing provisions, nothing herein shall be construed to restrict the Company’s ability to file, or require the Company to provide notice to Cowen of the filing of, a registration statement under the Securities Act.

(k) Change of Circumstances. The Company will, at any time during the pendency of a Placement Notice or sale of Shares hereunder or pursuant to a Terms Agreement, advise Cowen promptly after it shall have received notice or obtained knowledge thereof, of any information or fact that would alter or affect in any material respect any opinion, certificate, letter or other document provided to Cowen pursuant to this Agreement or any Terms Agreement.

(l) Due Diligence Cooperation. The Company will cooperate with any reasonable due diligence review conducted by Cowen or its agents from time to time in connection with the transactions contemplated hereby or by any Terms Agreement, including, without limitation, providing information and making available documents and senior corporate officers, during regular business hours and at the Company’s principal offices, as Cowen may reasonably request.

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(m) Required Filings Relating to Placement of Shares. The Company agrees that on such dates as the Securities Act shall require, the Company will (i) file a prospectus supplement with the Commission under the applicable paragraph of Rule 424(b) under the Securities Act (each and every filing under Rule 424(b) relating to the Shares, a “**Filing Date**”), which prospectus supplement will set forth, within the relevant period, the amount of Shares sold through Cowen, the Net Proceeds to the Company and the compensation payable by the Company to Cowen with respect to such Shares, and (ii) deliver such number of copies of each such prospectus supplement to each exchange or market on which such sales were effected as may be required by the rules or regulations of such exchange or market.

(n) Representation Dates; Certificate. On or prior to the First Delivery Date and each time thereafter during the term of this Agreement the Company (i) files the Prospectus relating to the Shares or amends or supplements the Registration Statement or the Prospectus relating to the Shares (other than a prospectus supplement filed in accordance with Section 7(m) of this Agreement) by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of document(s) by reference to the Registration Statement or the Prospectus relating to the Shares; (ii) files an annual report on Form 10-K under the Exchange Act; (iii) files a quarterly report on Form 10-Q under the Exchange Act; or (iv) files a report on Form 8-K containing amended financial information (other than an earnings release or other information “furnished”) under the Exchange Act (each date of filing of one or more of the documents referred to in clauses (i) through (iv) shall be a “**Representation Date**”); the Company shall furnish Cowen (but in the case of clause (iv) above only if (1) a Placement Notice is pending, (2) Cowen reasonably determines that the information contained in such Form 8-K is material to a holder of Common Stock and (3) Cowen requests such certificate within three (3) days after the filing of such Form 8-K with the Commission) with a certificate, in the form attached hereto as Exhibit 7(n) within three (3) Trading Days of any Representation Date if requested by Cowen. The requirement to provide a certificate under this Section 7(n) shall be automatically waived for any Representation Date occurring at a time at which no Placement Notice is pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Placement Notice hereunder (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date; *provided, however*, that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Shares in an Agency Transaction following a Representation Date when the Company relied on such waiver and did not provide Cowen with a certificate under this Section 7(n), then before the Company delivers the Placement Notice or Cowen sells any Shares pursuant to such Agency Transaction, the Company shall provide Cowen with a certificate, in the form attached hereto as Exhibit 7(n), dated the date of the Placement Notice. With respect to any Principal Transaction pursuant to a Terms Agreement, the certificate in the form attached hereto as Exhibit 7(n) shall be delivered at the Principal Settlement Date.

(o) Legal Opinions. On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit 7(n) for which no waiver is applicable, the Company shall cause to be furnished to Cowen:

(i) a written opinion or statement of Wilmer Cutler Pickering Hale and Dorr LLP (“**Company Counsel**”), or other counsel reasonably satisfactory to Cowen, in form and substance satisfactory to Cowen and its counsel, substantially similar to the form previously provided to Cowen and its counsel, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented;

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(ii) a written opinion or statement of Choate Hall & Stewart LLP, outside intellectual property counsel for the Company (“**Choate Hall**”), or other counsel reasonably satisfactory to Cowen, in form and substance satisfactory to Cowen and its counsel, dated the date that the opinion is required to be delivered, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented;

(iii) a written opinion or statement of Perkins Coie LLP, outside intellectual property counsel for the Company (“**Perkins Coie**”), or other counsel reasonably satisfactory to Cowen, in form and substance satisfactory to Cowen and its counsel, dated the date that the opinion is required to be delivered, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented;

(iv) a written opinion or statement of Rothwell, Figg, Ernst & Manbeck, P.C., outside intellectual property counsel for the Company (“**Rothwell, Figg**” and, together with Choate Hall and Perkins Coie, each a “**Company IP Counsel**”), or other counsel reasonably satisfactory to Cowen, in form and substance satisfactory to Cowen and its counsel, dated the date that the opinion is required to be delivered, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented;

*provided, however*, the Company shall not be required to furnish any such opinions or statements if the Company does not intend to deliver a Placement Notice in such calendar quarter until such time as the Company delivers its next Placement Notice; *provided, however*, that in lieu of such opinions for subsequent Representation Dates, in each case, counsel may furnish Cowen with a letter (a “**Reliance Letter**”) to the effect that Cowen may rely on a prior opinion delivered under this Section 7(o) to the same extent as if it were dated the date of such letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented at such Representation Date). The requirement to provide the opinions under this Section 7(o) shall be waived (i) for any Representation Date occurring at a time at which no Placement Notice is pending or (ii) with respect to any Representation Date, in Cowen’s discretion. Notwithstanding the foregoing, if the Company subsequently decides to sell Shares in an Agency Transaction following a Representation Date when the Company relied on such waiver and did not provide Cowen with the opinions under this Section 7(o), then before the Company delivers the Placement Notice or Cowen sells any Shares pursuant to such Agency Transaction, Cowen may, in its discretion, require the Company to provide Cowen with some or all of the opinions under this Section 7(o), substantially similar to the forms previously provided to Cowen and its counsel, each dated the date of the Placement Notice; *provided, however*, the Company shall be required to furnish to Cowen no more than one of each such opinion hereunder per calendar quarter. With respect to any Principal Transaction pursuant to a Terms Agreement, the Company shall cause to be furnished to Cowen on the Principal Settlement Date a written opinion of Company Counsel and each of Company IP Counsel, or other counsel reasonably satisfactory to Cowen, in form and substance satisfactory to Cowen and its counsel, dated the Principal Settlement Date.

(p) **Comfort Letter**. On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit 7(n) for which no waiver is applicable, the Company shall cause its independent accountants to furnish Cowen a letter (the “**Comfort Letter**”), dated the date that the Comfort Letter is delivered, in form and substance reasonably satisfactory to Cowen, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act and the Public Company Accounting Oversight Board, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants’ “comfort letters” to Cowen in connection with registered public offerings (the first such letter, the “**Initial Comfort Letter**”) and (iii) updating the Initial Comfort Letter with any information that would have been included in the Initial Comfort Letter had it been given on such date and modified as necessary to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter; *provided* that the Company shall be required to furnish to Cowen no more than one Comfort Letter hereunder per calendar quarter. With respect to any Principal Transaction pursuant to a Terms Agreement, the Company shall cause its independent accountants to furnish Cowen, in form and substance satisfactory to Cowen, Comfort Letter at the applicable Time of Sale, dated the date of such Time of Sale, and on the Principal Settlement Date, dated the Principal Settlement Date.

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(q) Market Activities. The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares or (ii) sell, bid for, or purchase the Shares to be issued and sold pursuant to this Agreement or any Terms Agreement in violation of Regulation M, or pay anyone any compensation for soliciting purchases of the Shares other than Cowen; provided, however, that the Company may bid for and purchase shares of its common stock in accordance with Rule 10b-18 under the Exchange Act.

(r) Insurance. The Company and its subsidiaries shall maintain, or cause to be maintained, insurance in such amounts and covering such risks as is reasonable and customary for the business for which it is engaged.

(s) Compliance with Laws. The Company and each of its subsidiaries shall maintain, or cause to be maintained, all material environmental permits, licenses and other authorizations required by federal, state and local law in order to conduct their businesses as described in the Prospectus, and the Company and each of its subsidiaries shall conduct their businesses, or cause their businesses to be conducted, in substantial compliance with such permits, licenses and authorizations and with applicable environmental laws, except where the failure to maintain or be in compliance with such permits, licenses and authorizations could not reasonably be expected to result in a material adverse effect on the Company and its subsidiaries, taken as a whole.

(t) Investment Company Act. The Company will conduct its affairs in such a manner so as to reasonably ensure that neither it nor its subsidiaries will be or become, at any time prior to the termination of this Agreement, an "investment company," as such term is defined in the Investment Company Act, assuming no change in the Commission's current interpretation as to entities that are not considered an investment company.

(u) Securities Act and Exchange Act. The Company will use its reasonable efforts to comply with all requirements imposed upon it by the Securities Act and the Exchange Act as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Shares as contemplated by the provisions hereof and the Prospectus.

(v) No Offer to Sell. Other than the Prospectus and any Permitted Free Writing Prospectus, neither Cowen nor the Company (including its agents and representatives, other than Cowen in its capacity as such) will make, use, prepare, authorize, approve or refer to any written communication (as defined in Rule 405 under the Securities Act), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy Shares hereunder.

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(w) Sarbanes-Oxley Act. The Company and its subsidiaries will use their reasonable efforts to comply with all effective applicable provisions of the Sarbanes-Oxley Act.

8. Conditions to Cowen's Obligations. The obligations of Cowen hereunder with respect to a Placement Notice or pursuant to any Terms Agreement will be subject to the continuing accuracy and completeness of the representations and warranties made by the Company herein, to the due performance by the Company of its obligations hereunder and thereunder, to the completion by Cowen of due diligence reviews satisfactory to Cowen in its reasonable judgment, and to the continuing satisfaction (or waiver by Cowen in its sole discretion) of the following additional conditions:

(a) Registration Statement Effective. The Registration Statement shall be effective and shall be available for the sale of all Shares contemplated to be issued pursuant to any Placement Notice or any Terms Agreement.

(b) No Material Notices. None of the following events shall have occurred and be continuing: (i) receipt by the Company or any of its subsidiaries of any request for additional information from the Commission or any other federal or state governmental authority during the period of effectiveness of the Registration Statement, the response to which would require any post-effective amendments or supplements to the Registration Statement or the Prospectus; (ii) the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose; (iii) receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Shares for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; or (iv) the occurrence of any event that makes any material statement made in the Registration Statement or the Prospectus or any material document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, the Prospectus or such documents so that, in the case of the Registration Statement, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading and, that in the case of the Prospectus, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(c) No Misstatement or Material Omission. Cowen shall not have advised the Company that the Registration Statement or Prospectus, or any amendment or supplement thereto, contains an untrue statement of fact that in Cowen's reasonable opinion is material, or omits to state a fact that in Cowen's reasonable opinion is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(d) No Downgrade. There shall not have occurred any downgrading, nor shall any notice have been given of any intended or potential downgrading or of any review for a possible change that does not indicate the direction of the possible change, in the rating accorded any of the securities of the Company by any "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) of the Exchange Act that, in the reasonable judgment of Cowen, makes it impracticable to market the Shares on the terms and in the manner contemplated in the Prospectus.

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(e) Material Change. There shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Prospectus that, in the judgment of Cowen, is material and adverse and that makes it, in the reasonable judgment of Cowen, impracticable to market the Shares on the terms and in the manner contemplated in the Prospectus.

(f) Company Counsel and Company IP Counsel Legal Opinions. Cowen shall have received the opinions of Company Counsel and each of the Company IP Counsels, each required to be delivered pursuant to Section 7(o) on or before the date on which such delivery of such opinions is required pursuant to Section 7(o).

(g) Cowen Counsel Legal Opinion. Cowen shall have received from Davis Polk & Wardwell LLP, counsel for Cowen, such opinion or opinions, on or before the date on which the delivery of the Company Counsel legal opinion is required pursuant to Section 7(o), with respect to such matters as Cowen may reasonably require, and the Company shall have furnished to such counsel such documents as they request for enabling them to pass upon such matters.

(h) Comfort Letter. Cowen shall have received the Comfort Letter required to be delivered pursuant Section 7(p) on or before the date on which such delivery of such Comfort Letter is required pursuant to Section 7(p).

(i) Representation Certificate. Cowen shall have received the certificate required to be delivered pursuant to Section 7(n) on or before the date on which delivery of such certificate is required pursuant to Section 7(n).

(j) Secretary's Certificate. On or prior to the First Delivery Date and at each Principal Settlement Date, Cowen shall have received a certificate, signed on behalf of the Company by its corporate Secretary, in form and substance reasonably satisfactory to Cowen and its counsel.

(k) No Suspension. Trading in the Common Stock shall not have been suspended on Nasdaq.

(l) Other Materials. On each date on which the Company is required to deliver a certificate pursuant to Section 7(n), the Company shall have furnished to Cowen such appropriate further information, certificates and documents as Cowen may have reasonably requested. All such opinions, certificates, letters and other documents shall have been in compliance with the provisions hereof. The Company will furnish Cowen with such conformed copies of such opinions, certificates, letters and other documents as Cowen shall have reasonably requested.

(m) Securities Act Filings Made. All filings with the Commission required by Rule 424 under the Securities Act to have been filed prior to the issuance of any Placement Notice hereunder or prior to any Principal Settlement Date shall have been made within the applicable time period prescribed for such filing by Rule 424. The Company shall file a prospectus supplement or a supplement to a prospectus supplement in connection with any Principal Transaction pursuant to a Terms Agreement within the applicable time period prescribed for such filing by Rule 424.

(n) Approval for Listing. The Shares shall either have been (i) approved for listing on Nasdaq, subject only to notice of issuance, or (ii) the Company shall have filed an application for listing of the Shares on Nasdaq at, or prior to, the issuance of any Placement Notice.

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(o) No Termination Event. There shall not have occurred any event that would permit Cowen to terminate this Agreement pursuant to Section 11(a).

9. Indemnification and Contribution.

(a) Company Indemnification. The Company agrees to indemnify and hold harmless Cowen, the directors, officers, partners, employees and agents of Cowen and each person, if any, who (i) controls Cowen within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, or (ii) is controlled by or is under common control with Cowen from and against any and all losses, claims, liabilities, expenses and damages (including, but not limited to, any and all reasonable investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(c)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which Cowen, or any such person, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based, directly or indirectly, on (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement to the Registration Statement or the Prospectus or in any free writing prospectus or in any application or other document executed by or on behalf of the Company in connection with this Agreement or based on written information furnished by or on behalf of the Company filed in any jurisdiction in order to qualify the Shares under the securities laws thereof or filed with the Commission, or (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading; *provided, however*, that this indemnity agreement shall not apply to the extent that such loss, claim, liability, expense or damage arises from the sale of the Shares pursuant to this Agreement or any Terms Agreement and is caused directly or indirectly by an untrue statement or omission made in reliance upon and in conformity with the Agent Information. This indemnity agreement will be in addition to any liability that the Company might otherwise have.

(b) Cowen Indemnification. Cowen agrees to indemnify and hold harmless the Company and its directors and each officer of the Company that signed the Registration Statement, and each person, if any, who (i) controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or (ii) is controlled by or is under common control with the Company against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 9(a), as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendments thereto) or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Agent Information.

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly after the indemnifying party receives a written invoice relating to fees, disbursements and other charges in reasonable detail. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 9 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding.

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(d) Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 9 is applicable in accordance with its terms but for any reason is held to be unavailable from the Company or Cowen, the Company and Cowen will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than Cowen, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) to which the Company and Cowen may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and Cowen on the other. The relative benefits received by the Company on the one hand and Cowen on the other hand shall be deemed to be in the same proportion as the total Net Proceeds from the sale of the Shares (before deducting expenses) received by the Company bear to the total compensation received by Cowen from the sale of Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and Cowen, on the other, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or Cowen, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and Cowen agree that it would not be just and equitable if contributions pursuant to this Section 9(d) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 9(d) shall be deemed to include, for the purpose of this Section 9(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 9(c) hereof. Notwithstanding the foregoing provisions of this Section 9(d), Cowen shall not be required to contribute any amount in excess of the commissions received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 9(d), any person who controls a party to this Agreement or any Terms Agreement within the meaning of the Securities Act, and any officers, directors, partners, employees or agents of Cowen, will have the same rights to contribution as that party, and each officer and director of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 9(d), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 9(d) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c) hereof.

10. Representations and Agreements to Survive Delivery. The indemnity and contribution agreements contained in Section 9 of this Agreement and all representations and warranties of the Company herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of Cowen, any controlling persons, or the Company (or any of their respective officers, directors or controlling persons), (ii) delivery and acceptance of the Shares and payment therefor or (iii) any termination of this Agreement.

11. Termination.

(a) Cowen shall have the right by giving notice as hereinafter specified at any time to terminate this Agreement if (i) any material adverse effect, or any development that could reasonably be expected to result in a material adverse effect, has occurred that, in the reasonable judgment of Cowen, may materially impair the ability of Cowen to sell the Shares hereunder, (ii) the Company shall have failed, refused or been unable to perform any agreement on its part to be performed hereunder; *provided, however*, in the case of any failure of the Company to deliver (or cause another person to deliver) any certification, opinion, or letter required under Sections 7(n), 7(o), or 7(p), Cowen's right to terminate shall not arise unless such failure to deliver (or cause to be delivered) continues for more than thirty (30) days from the date such delivery was required; (iii) any other condition of Cowen's obligations hereunder is not fulfilled, or (iv), any suspension or limitation of trading in the Shares or in securities generally on Nasdaq shall have occurred. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(h) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. If Cowen elects to terminate this Agreement as provided in this Section 11(a), Cowen shall provide the required notice as specified in Section 12 (Notices).

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(b) In the case of any purchase by Cowen pursuant to a Terms Agreement, the obligations of Cowen pursuant to such Terms Agreement shall be subject to termination by Cowen at any time prior to or at the Principal Settlement Date if since the time of execution of the Terms Agreement, (i) there has occurred any outbreak or escalation of hostilities or other national or international calamity or crisis or change in economic, political or other conditions, the effect of which on the United States or international financial markets is material and adverse and makes it, in Cowen's judgment, impracticable to market the Shares or enforce contracts for the sale of the Shares in the manner contemplated by such Terms Agreement; or (ii) trading in any securities of the Company has been suspended by the Commission or by the Nasdaq, or trading generally on the Nasdaq or the New York Stock Exchange has been suspended (including an automatic halt in trading pursuant to market-decline triggers, other than those in which solely program trading is temporarily halted), or limitations on prices for trading (other than limitations on hours or numbers of days of trading) have been fixed, or maximum ranges for prices for securities have been required, by such exchange; or (iii) there has been any downgrade in the rating of any of the Company's debt securities or preferred stock by any "nationally recognized statistical rating organization" (as defined under Section 3(a)(62) of the Exchange Act); or (iv) a general moratorium on commercial banking activities shall have been declared by federal or New York State authorities. If Cowen elects to terminate its obligations pursuant to this Section 11(b), it shall notify the Company promptly in writing.

(c) The Company shall have the right, by giving ten (10) days' notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(h), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(d) Cowen shall have the right, by giving ten (10) days' notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(h), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(e) Unless earlier terminated pursuant to this Section 11, this Agreement shall automatically terminate upon the issuance and sale of all of the Shares through or to Cowen on the terms and subject to the conditions set forth herein; *provided* that the provisions of Section 7(h), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(f) This Agreement shall remain in full force and effect unless terminated pursuant to Sections 11(a), (c), (d), or (e) above or otherwise by mutual agreement of the parties; *provided, however*, that any such termination by mutual agreement shall in all cases be deemed to provide that Section 7(h), Section 9, Section 10, Section 16 and Section 17 shall remain in full force and effect. Upon termination of this Agreement, the Company shall not have any liability to Cowen for any discount, commission or other compensation with respect to any Shares not otherwise sold by Cowen under this Agreement, or otherwise, except with respect to reimbursement of expenses pursuant to Section 7(h).

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(g) Any termination of this Agreement shall be effective on the date specified in such notice of termination; *provided, however*, that such termination shall not be effective until the close of business on the date of receipt of such notice by Cowen or the Company, as the case may be. If such termination shall occur prior to the Settlement Date for any sale of Shares, such Shares shall settle in accordance with the provisions of this Agreement.

12. **Notices.** All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement or any Terms Agreement shall be in writing, unless otherwise specified in this Agreement, and if sent to Cowen, shall be delivered to Cowen at Cowen and Company, LLC, 599 Lexington Avenue, 27th Floor, New York, NY 10022, fax no. 646-562-1124, Attention: General Counsel, with a copy to Davis Polk & Wardwell LLP, 450 Lexington Avenue, New York, New York 10017; Attention: Richard Truesdell, Jr., Esq.; or if sent to the Company, shall be delivered to Editas Medicine, Inc., 11 Hurley Street, Cambridge, Massachusetts 02141; Attention: Chief Financial Officer, with a copy to Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109; Attention: Rosemary G. Reilly, Esq. Each party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose. Each such notice or other communication shall be deemed given (i) when delivered personally or by verifiable facsimile transmission (with an original to follow) on or before 4:30 p.m., New York City time, on a Business Day (as defined below), or, if such day is not a Business Day on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which Nasdaq and commercial banks in the City of New York are open for business.

13. **Successors and Assigns.** This Agreement and any Terms Agreement shall inure to the benefit of and be binding upon the Company and Cowen and their respective successors and the affiliates, controlling persons, officers and directors referred to in Section 9 hereof. References to any of the parties contained in this Agreement or any Terms Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement or any Terms Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement or any such Terms Agreement, except as expressly provided in this Agreement or such Terms Agreement. Neither party may assign its rights or obligations under this Agreement or any Terms Agreement without the prior written consent of the other party; *provided, however*, that Cowen may assign its rights and obligations hereunder or under any Terms Agreement to an affiliate of Cowen without obtaining the Company's consent, so long as such affiliate is a registered broker-dealer.

14. **Adjustments for Share Splits.** The parties acknowledge and agree that all share-related numbers contained in this Agreement or any Terms Agreement shall be adjusted to take into account any share split, share dividend or similar event effected with respect to the Common Stock.

15. **Entire Agreement; Amendment; Severability.** This Agreement (including all schedules and exhibits attached hereto and Placement Notices issued pursuant hereto), together with any Terms Agreement and any other agreement entered into between the Company and Cowen in connection with the offer and sale of Shares pursuant to this Agreement, constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof. Neither this Agreement, nor any Terms Agreement, nor any term hereof may be amended except pursuant to a written instrument executed by the Company and Cowen. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement and any Terms Agreement.

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16. Applicable Law; Consent to Jurisdiction. This Agreement and any Terms Agreement shall be governed by, and construed in accordance with, the internal laws of the State of New York without regard to the principles of conflicts of laws. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York, borough of Manhattan, for the adjudication of any dispute hereunder or in connection with any transaction contemplated hereby or by any Terms Agreement, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof (certified or registered mail, return receipt requested) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law.

17. Waiver of Jury Trial. The Company and Cowen each hereby irrevocably waives any right it may have to a trial by jury in respect of any claim based upon or arising out of this Agreement, any Terms Agreement or any transaction contemplated hereby or thereby.

18. Absence of Fiduciary Relationship. The Company acknowledges and agrees that:

(a) Cowen has been retained solely to act as an arm's length contractual counterparty to the Company in connection with the sale of the Shares contemplated hereby and any Terms Agreement and that no fiduciary, advisory or agency relationship between the Company and Cowen has been created in respect of any of the transactions contemplated by this Agreement or any Terms Agreement, irrespective of whether Cowen has advised or is advising the Company on other matters;

(b) the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement or any Terms Agreement;

(c) the Company has been advised that Cowen and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that Cowen has no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

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(d) the Company waives, to the fullest extent permitted by law, any claims it may have against Cowen, for breach of fiduciary duty or alleged breach of fiduciary duty and agrees that Cowen shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, partners, employees or creditors of the Company.

19. Counterparts. This Agreement and any Terms Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement or any Terms Agreement by one party to the other may be made by facsimile or electronic transmission.

20. Definitions. As used in this Agreement, the following terms have the meaning set forth below:

(a) “*Applicable Time*” means the date of this Agreement, each date on which the Company executes and delivers a Terms Agreement, each Time of Sale, each Settlement Date, each Representation Date, the date on which a Placement Notice is given, and any date on which Shares are sold hereunder.

(b) “*Agent Information*” means, (i) the following information in the Prospectus: the last sentence of the ninth paragraph and the eleventh paragraph under the caption “Plan of Distribution” in the Prospectus and (ii) any written information relating to Cowen and furnished to the Company by Cowen expressly for inclusion in any document as described in clause (x) of Section 9(a).

**[Remainder of Page Intentionally Blank]**

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If the foregoing correctly sets forth the understanding between the Company and Cowen, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between the Company and Cowen.

Very truly yours,

**COWEN AND COMPANY, LLC**

By: /s/ Michael Murphy

Name: Michael Murphy

Title: Managing Director

**ACCEPTED as of the date  
first-above written:**

**EDITAS MEDICINE, INC.**

By: /s/ Michelle Robertson

Name: Michelle Robertson

Title: Chief Financial Officer

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WILMERHALE

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wilmerhale.com

May 14, 2021

Editas Medicine, Inc.  
11 Hurley Street  
Cambridge, MA 02141

Re: Prospectus Supplement to Registration Statement on Form S-3

Ladies and Gentlemen:

This opinion is furnished to you in connection with (i) the Registration Statement on Form S-3 (File No. 333-253715) (the "Registration Statement") filed by Editas Medicine, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of, among other things, an indeterminate number of shares of Common Stock, par value \$0.0001 per share (the "Common Stock") of the Company which may be issued from time to time on a delayed or continuous basis by the Company pursuant to Rule 415 under the Securities Act, as set forth in the Registration Statement and the prospectus contained therein (the "Base Prospectus") and (ii) the prospectus supplement, dated May 14, 2021 (the "Prospectus Supplement" and, together with the Base Prospectus, the "Prospectus") relating to the issuance and sale from time to time by the Company of shares of Common Stock having an aggregate offering price of up to \$300,000,000 of shares of Common Stock (the "Shares"). The Shares are to be issued and sold pursuant to a Common Stock Sales Agreement, dated May 14, 2021 between the Company and Cowen and Company, LLC (the "Sales Agreement"). We are acting as counsel for the Company in connection with the issue and sale by the Company of the Shares.

We have examined and relied upon copies of the Registration Statement and the Prospectus as filed with the Commission. We have also examined and relied upon the Sales Agreement, the Restated Certificate of Incorporation of the Company (as amended or restated from time to time, the "Certificate of Incorporation"), the Amended and Restated Bylaws of the Company (as amended or restated from time to time, the "Bylaws") and minutes of meetings of the stockholders and the Board of Directors of the Company as provided to us by the Company for purposes of rendering the opinion hereinafter set forth.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

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May 14, 2021

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We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the State of New York, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares have been issued and paid for in accordance with the terms and conditions of the Sales Agreement, the Shares will be validly issued, fully paid and non-assessable.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act as an exhibit to the Current Report on Form 8-K to be filed by the Company on the date hereof in connection with the issuance and sale of the Shares and to the use of our name therein and in the related Prospectus Supplement under the caption "Legal Matters." In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING  
HALE AND DORR LLP

By: /s/ Rosemary G. Reilly  
Rosemary G. Reilly, a Partner

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