As filed with the Securities and Exchange Commission on February 28, 2024

Registration No. 333-__

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

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

46-4097528 **Delaware** (State or Other Jurisdiction of Incorporation (I.R.S. Employer or Organization) Identification No.)

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

02141 (Zip Code)

2015 Stock Incentive Plan Inducement Stock Option Awards (May 2023- September 2023)

(Full Title of the Plans)

Gilmore O'Neill **President and Chief Executive Officer** Editas Medicine, Inc. 11 Hurley Street Cambridge, Massachusetts 02141 (Name and Address of Agent For Service)

(617) 401-9000

(Telephone Number, Including Area Code, of Agent For Service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	\boxtimes	Accelerated filer	
Non-accelerated filer		Smaller reporting company	
		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 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

This Registration Statement on Form S-8 as it relates to the 2015 Stock Incentive Plan (the "2015 Plan") of Editas Medicine, Inc. (the "Registrant") registers an additional 3,270,691 securities of the same class as other securities for which Registration Statements filed on Form S-8 have been previously filed and are effective.

This Registration Statement is also being filed for the purpose of registering 414,650 shares of common stock issuable upon exercise of inducement stock options pursuant to inducement stock option agreements with certain employees of the Registrant in accordance with Nasdaq Listing Rule 5635(c)(4).

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

The information required by Item 1 is included in documents sent or given to the participant in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act").

Item 2. Registrant Information and Employee Plan Annual Information.

The written statement required by Item 2 is included in documents sent or given to the participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Registrant is subject to the informational and reporting requirements of Sections 13(a), 14, and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). The following documents, which are on file with the Commission, are incorporated in this registration statement by reference:

- (1) The Registrant's latest annual report filed pursuant to Section 13(a) or 15(d) of the Exchange Act or the latest prospectus filed pursuant to Rule 424(b) under the Securities Act that contains audited financial statements for the Registrant's latest fiscal year for which such statements have been filed.
- (2) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the document referred to in (a) above.
- (3) The description of the securities contained in the Registrant's registration statement on Form 8-A filed with the Commission on January 29, 2016, as the description therein has been updated and superseded by the description of our common stock contained in Exhibit 4.2 of our Annual Report on Form 10-K for the year ended December 31, 2023, as filed with the SEC on February 28, 2024, including any amendment or report filed for the purpose of updating such description.

This Registration Statement on Form S-8, relating to the 2015 Plan of the Registrant, is being filed for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 relating to the 2015 Plan has previously been filed and is effective. Pursuant to General Instruction E to Form S-8, except in each case for Item 8, Exhibits, this Registration Statement on Form S-8 incorporates by reference the contents of the following Registration Statements on Form S-8 previously filed by the Registrant with the Securities and Exchange Commission:

(1) Registration Statement on Form S-8, File No. 333-209351, filed with the Securities and Exchange Commission on February 3, 2016 by the Registrant, relating to the Registrant's 2013 Stock Incentive Plan, 2015 Stock Incentive Plan and 2015 Employee Stock Purchase Plan.

- (2) Registration Statement on Form S-8, File No. 333-216445, filed with the Securities and Exchange Commission on March 3, 2017 by the Registrant, relating to the Registrant's 2015 Stock Incentive Plan and 2015 Employee Stock Purchase Plan.
- (3) Registration Statement on Form S-8, File No. 333-223529, filed with the Securities and Exchange Commission on March 8, 2018 by the Registrant, relating to the Registrant's 2015 Stock Incentive Plan and 2015 Employee Stock Purchase Plan.
- (4) Registration Statement on Form S-8, File No. 333-230266, filed with the Securities and Exchange Commission on March 14, 2019 by the Registrant, relating to the Registrant's 2015 Stock Incentive Plan and 2015 Employee Stock Purchase Plan.
- (5) Registration Statement on Form S-8, File No. 333-236662, filed with the Securities and Exchange Commission on February 26, 2020 by the Registrant, relating to the Registrant's 2015 Stock Incentive Plan, 2015 Employee Stock Purchase Plan, Inducement Stock Option Awards (October 2019 January 2020), and Inducement Restricted Stock Unit Awards (October 2019 January 2020).
- (6) Registration Statement on Form S-8, File No. 333-253716, filed with the Securities and Exchange Commission on March 1, 2021 by the Registrant, relating to the Registrant's 2015 Stock Incentive Plan, 2015 Employee Stock Purchase Plan, Inducement Stock Option Award (November 2020), and Inducement Restricted Stock Unit Award (November 2020).
- (7) Registration Statement on Form S-8, File No. 333-262977, filed with the Securities and Exchange Commission on February 24, 2022 by the Registrant, relating to the Registrant's 2015 Stock Incentive Plan, 2015 Employee Stock Purchase Plan, Inducement Stock Option Awards (June 2021), and Inducement Restricted Stock Unit Awards (June 2021).
- (8) Registration Statement on Form S-8, File No. 333-269917, filed with the Securities and Exchange Commission on February 22, 2023 by the Registrant, relating to the Registrant's 2015 Stock Incentive Plan and Inducement Stock Option Awards (June 2022 July 2022).

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware (the "DGCL") permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Registrant's certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

The Registrant's certificate of incorporation provides that it will indemnify each person who was or is a party or threatened to be made a party or is involved in to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Registrant) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful.

The Registrant's certificate of incorporation also provides that it will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of the Registrant to procure a judgment in the Registrant's favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the Registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by the Registrant against all expenses (including attorneys' fees) actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If the Registrant does not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

The Registrant has entered into indemnification agreements with each of its directors and executive officers. These indemnification agreements require the Registrant under circumstances to, among other things, indemnify these directors and executive officers for some expenses, including attorneys' fees, judgments, fines, and settlement amounts incurred by each of these directors and executive officers in any action or proceeding arising out of his or her service as one of the Registrant's directors or officers, or any of the Registrant's subsidiaries or any other company or enterprise to which the person provides services at the Registrant's request.

The Registrant maintains a general liability insurance policy that covers certain liabilities of the directors and officers of the Registrant arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

<u>Number</u>	<u>Description</u>
4.1(1)	Restated Certificate of Incorporation of the Registrant
4.2(2)	Amended and Restated By-Laws of the Registrant
5.1	Opinion of Wilmer Cutler Pickering Hale & Dorr LLP, counsel to the Registrant
23.1	Consent of Wilmer Cutler Pickering Hale & Dorr LLP (included in Exhibit 5.1)
23.2	Consent of Ernst & Young LLP, independent registered public accounting firm
24.1	Power of attorney (included on the signature pages of this registration statement)
99.1(3)	2015 Stock Incentive Plan
99.2(4)	Form of Inducement Stock Option Agreement
107	Filing Fee Table

⁽¹⁾ Previously filed with the Securities and Exchange Commission on February 8, 2016 as Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-37687) and incorporated herein by reference.

- 2) Previously filed with the Securities and Exchange Commission on March 14, 2023 as Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-37687) and incorporated berein by reference
- No. 001-37687) and incorporated herein by reference.

 (3) Previously filed with the Securities and Exchange Commission on January 4, 2016 as Exhibit 10.10 to the Registrant's Registration Statement on Form S-1 (File No. 333-208856) and incorporated herein by reference.
- (4) Previously filed with the Securities and Exchange Commission on February 26, 2020 as Exhibit 10.15 to the Registrant's Annual Report on Form 10-K (File No. 001-37687) and incorporated herein by reference.

Item 9. Undertakings.

- 1. <u>Item 512(a) of Regulation S-K</u>. The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

- 2. <u>Item 512(b) of Regulation S-K</u>. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- 3. <u>Item 512(h) of Regulation S-K</u>. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on February 28, 2024.

EDITAS MEDICINE, INC.

By: /s/ Gilmore O'Neill

Gilmore O'Neill

President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Editas Medicine, Inc., hereby severally constitute and appoint Gilmore O'Neill and Erick Lucera and each of them singly, our true and lawful attorneys with full power to them, and to each of them singly, to sign for us and in our names in the capacities indicated below the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Editas Medicine, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Gilmore O'Neill	President, Chief Executive Officer and Director (principal	February 28, 2024
Gilmore O'Neill	executive officer)	
/s/ Erick Lucera	Chief Financial Officer (principal financial and accounting	February 28, 2024
Erick Lucera	officer)	
/s/ Emma Reeve	Chair of the Board of Directors	February 28, 2024
Emma Reeve	<u> </u>	
/s/ Meeta Chatterjee	Director	February 28, 2024
Meeta Chatterjee, Ph.D.		
/s/ Bernadette Connaughton	Director	February 28, 2024
Bernadette Connaughton		
/s/ Andrew Hirsch	Director	February 28, 2024
Andrew Hirsch		
/s/ Jessica Hopfield	Director	February 28, 2024
Jessica Hopfield, Ph.D.		
/s/ Elliott Levy	Director	February 28, 2024
Elliott Levy		
/s/ David Scadden	Director	February 28, 2024
David Scadden, M.D.		
/s/ Akshay K. Vaishnaw	Director	February 28, 2024
Akshay K. Vaishnaw, M.D., Ph.D.		

Calculation of Filing Fee Tables

Form S-8

(Form Type)

Editas Medicine, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1—Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, \$0.0001 par value per share	Other	3,270,691 shares (2)	\$7.80 (6)	\$25,511,389.80 (6)	\$147.60 per \$1,000,000	\$3,765.49
Equity	Common Stock, \$0.0001 par value per share	Other	155,800 shares (3)	\$9.61 (7)	\$1,497,238.00 (7)	\$147.60 per \$1,000,000	\$221.00
Equity	Common Stock, \$0.0001 par value per share	Other	135,500 shares (4)	\$8.66 (8)	\$1,173,430.00 (8)	\$147.60 per \$1,000,000	\$173.20
Equity	Common Stock, \$0.0001 par value per share	Other	123,350 shares (5)	\$8.00 (9)	\$986,800.00 (9)	\$147.60 per \$1,000,000	\$145.66
Total Offering Amounts				\$29,168,857.80		\$4,305.35	
Total Fee Offsets						_	
Net Fee Due				_		\$4,305.35	

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Consists of additional shares issuable under the Editas Medicine, Inc. 2015 Stock Incentive Plan (the "2015 Stock Incentive Plan").
- (3) Consists of shares issuable under an inducement stock option award pursuant to an inducement stock option agreement entered into by Editas Medicine, Inc. (the "Registrant") with Erick Lucera, the Registrant's Chief Financial Officer, which was granted on May 17, 2023, in accordance with Nasdaq Listing Rule 5635(c)(4).
- (4) Consists of shares issuable under an inducement stock option award pursuant to an inducement stock option agreement entered into by the Registrant with Linda C. Burkly, the Registrant's Chief Scientific Officer, which was granted on July 24, 2023, in accordance with Nasdaq Listing Rule 5635(c)(4).
- (5) Consists of shares issuable under an inducement stock option award pursuant to an inducement stock option agreement entered into by the Registrant with Caren Deardorf, the Registrant's Chief Commercial and Strategy Officer, which was granted on September 21, 2023, in accordance with Nasdaq Listing Rule 5635(c)(4).
- Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) under the Securities Act, and based upon the average of the high and low sale prices of the common stock, \$0.0001 par value per share (the "Common Stock"), of the Registrant as reported on the Nasdaq Global Select Market on February 23, 2024 for the additional shares issuable under the 2015 Stock Incentive Plan.
- (7) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act, based on the exercise price per share of the 155,800 shares issuable under the inducement stock option award for Erick Lucera.
- (8) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act, based on the exercise price per share of the 135,500 shares issuable under the inducement stock option award for Linda C. Burkly.
- (9) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act, based on the exercise price per share of the 123,350 shares issuable under the inducement stock option award for Caren Deardorf.

February 28, 2024

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

Re: Registration Statement on Form S-8; 2015 Stock Incentive Plan; Inducement Option Agreements (as defined below)

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to (i) an aggregate of 3,270,691 shares (the "Plan Shares") of common stock, \$0.0001 par value per share (the "Common Stock"), of Editas Medicine, Inc., a Delaware corporation (the "Company"), issuable under the Company's 2015 Stock Incentive Plan (the "2015 Plan") and (ii) an aggregate of 414,650 shares of Common Stock (the "Option Shares" and, collectively with the Plan Shares, the "Shares") pursuant to inducement stock option agreements between the Company and Erick Lucera, entered into in connection with Mr. Lucera's commencement of employment with the Company, between the Company and Linda C. Burkly, Ph.D., entered into in connection with Dr. Burkly's commencement of employment with the Company, and between the Company and Caren Deardorf, entered into in connection with Ms. Deardorf's commencement of employment with the Company (collectively, the "Inducement Option Agreements").

We have examined the Certificate of Incorporation and By-laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

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 certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the 2015 Plan and the Inducement Option Agreements, as applicable, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

Editas Medicine, Inc. February 28, 2024 Page 2

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

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

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.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and, if applicable, paid for in accordance with the terms and conditions of the 2015 Plan and the Inducement Option Agreements, as applicable, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. 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,

/s/ WILMER CUTLER PICKERING HALE AND DORR LLP WILMER CUTLER PICKERING HALE AND DORR LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2015 Stock Incentive Plan and Inducement Stock Option Awards (May 2023-September 2023) of Editas Medicine, Inc. of our reports dated February 28, 2024, with respect to the consolidated financial statements of Editas Medicine, Inc. and the effectiveness of internal control over financial reporting of Editas Medicine, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2023, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts February 28, 2024