

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee (3)
Common Stock, \$0.0001 par value per share	80,000	\$ 28.72	\$ 2,297,600.00	\$ 286.06

- Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional securities issuable in connection with any stock split, stock dividend, or similar transaction with respect to the securities being registered pursuant to this registration statement.
- Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based on average of high and low price per share of the common stock as reported on the Nasdaq Global Select Market on January 8, 2018.
- Calculated in accordance with Rule 457(r) under the Securities Act. This "Calculation of Registration Fee" table shall be deemed to update the "Calculation of Registration Fee" table in the registrant's Registration Statement on Form S-3 (File No. 333-222266) in accordance with Rules 456(b) and 457(r) under the Securities Act.

Prospectus Supplement No. 2 dated January 12, 2018
(To Prospectus Dated December 22, 2017)

80,000 Shares



Common Stock

This prospectus supplement relates to the offer and sale of an aggregate of 80,000 shares of common stock of Editas Medicine, Inc. held by the person named in the "selling stockholder" table included herein. The information in this prospectus supplement supplements the statements set forth under the captions "Selling Stockholders" and "Use of Proceeds" in the prospectus. This prospectus supplement should be read in conjunction with the prospectus, which is required to be delivered with this prospectus supplement.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 3 of the prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

SELLING STOCKHOLDER

On January 12, 2018, Editas Medicine, Inc. (the "Company" or "we") issued 80,000 shares of common stock of the Company, par value \$0.0001 per share, to The General Hospital Corporation, d/b/a Massachusetts General Hospital ("MGH") in full satisfaction of a success payment obligation under the license agreement, dated as of August 2, 2016, between the Company and MGH (the "MGH Agreement").

The following table sets forth, to our knowledge, information concerning the beneficial ownership of shares of our common stock by the selling stockholder as of January 12, 2018. This information updates and supersedes the information contained under the heading "Selling Stockholders" in the prospectus dated December 22, 2017.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission, and includes voting or investment power with respect to shares. Unless otherwise indicated below, to our knowledge, the selling stockholder named in the table has sole voting and investment power with respect to its shares of common stock. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for the selling stockholder named below.

Except as set forth herein and in the prospectus, the selling stockholder has not held any position or office with, and has not otherwise had a material relationship with, us or any of our subsidiaries within the past three years.

Shares of Common Stock
Beneficially Owned Prior to

Number of Shares
of Common Stock

Shares of Common Stock to be
Beneficially Owned After

Name of Selling Stockholder	Offering		Being Offered	Offering (1)	
	Number	Percentage (2)		Number	Percentage (2)
The General Hospital Corporation	80,000	*	80,000	0	*

* Less than one percent.

(1) We do not know when or in what amounts the selling stockholder may offer shares for sale. The selling stockholder might not sell any or all of the shares covered by this prospectus. Because the selling stockholder may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements, or understandings with respect to the sale of any of the shares, we cannot estimate the number of the shares that will be held by the selling stockholder after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholder.

(2) Based on 44,940,852 shares of our common stock outstanding on January 9, 2018.

Description of Transactions with the Selling Stockholder

In August 2016, we entered into the MGH Agreement with MGH for specified patent rights (the “MGH Patent Rights”). The MGH Patent Rights are directed, in part, to CRISPR/Cas9 compositions of matter and their use for genome editing. Pursuant to the MGH Agreement, MGH granted us an exclusive, worldwide, royalty-bearing, sublicensable license to the MGH Patent Rights, to make, have made, use, have used, sell, offer for sale, have sold and import products and processes in the fields of the prevention and treatment of human and animal disease. We and MGH had previously entered into, and remain parties to, a license agreement, dated August 29, 2014 (as amended, the “2014 Agreement”), pursuant to which we have licensed certain other patent rights, know-how, and biological materials from MGH.

Under the MGH Agreement and the 2014 Agreement, we paid MGH upfront license fees, and are obligated to pay ongoing annual license maintenance fees, royalty, success and milestone payments. In addition, we previously issued an aggregate of 101,742 shares of our common stock to MGH pursuant to the 2014 Agreement. Success payments under the MGH Agreement may be paid in cash or by the issuance of shares of our common stock, at our

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sole election. In December 2017, we triggered the first success payment obligation of \$2,000,0000 under the MGH Agreement, which we paid in January 2018 by issuing 80,000 shares of our common stock to MGH.

In addition to the terms described above, the MGH Agreement and the 2014 Agreement include, among other things, terms related to limitation of liability, confidentiality, and control of patent prosecution. Under these terms, we have agreed to indemnify MGH against certain liabilities arising under the agreements. The MGH Agreement and the 2014 Agreement are described in greater detail in “Business—License Agreements—The General Hospital Corporation License Agreement” in our Annual Report on Form 10-K for the year ended December 31, 2016, which description is incorporated by reference herein.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares by the selling stockholder.

The selling stockholder will pay any underwriting discounts and commissions and expenses incurred by the selling stockholder for brokerage, accounting, tax, or legal services or any other expenses incurred by the selling stockholder in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus supplement, including, without limitation, all registration and filing fees, Nasdaq Global Select Market listing fees, and fees and expenses of our counsel and our accountants.

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