

Prospectus Supplement No. 2 dated August 14, 2017  
(To Prospectus Dated March 8, 2017)



### Common Stock

The information in this prospectus supplement supplements the statements set forth under the caption “Selling Stockholders” 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 Stockholders

In December 2016, Editas Medicine, Inc. (the “Company”) issued an Initial Promissory Note (as defined in the prospectus) in an aggregate original principal amount of \$9,200,000 to The Broad Institute, Inc. (“Broad”), and in March 2017, issued a promissory note in an aggregate original principal amount of \$4,600,000 (the “2017 Note”) to Broad, both of which were convertible at the Company’s option into shares of common stock of the Company. On August 4, 2017, the Company repaid all outstanding principal and interest on the 2017 Note by issuing an aggregate of 271,347 shares of common stock to Broad. On August 14, 2017, the Company repaid \$2.3 million of the outstanding principal and interest on the Initial Promissory Note held by Broad by issuing an aggregate of 108,104 shares of common stock to Broad.

The following table sets forth, to our knowledge, information concerning the beneficial ownership of shares of our common stock by the selling stockholders as of August 14, 2017. This information updates and supersedes the information contained under the heading “Selling Stockholders” in the prospectus dated March 8, 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 stockholders named in the table have sole voting and investment power with respect to their respective shares of common stock. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for the selling stockholders named below.

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

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering		Number of Shares of Common Stock Being Offered	Shares of Common Stock to be Beneficially Owned After Offering (1)	
	Number(2)	Percentage(3)		Number	Percentage(3)
The Broad Institute, Inc.	216,780	*	216,780	0	*
Wageningen University	0	*	0	0	*

\* Less than one percent.

(1) We do not know when or in what amounts the selling stockholders may offer shares for sale. The selling stockholders might not sell any or all of the shares covered by this prospectus. Because the selling stockholders 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 stockholders 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 stockholders.

(2) Does not include additional shares of common stock issuable upon settlement of the remaining outstanding portion of the Initial Promissory Notes (as defined in the prospectus) because such shares may be issued at our option, subject to certain conditions, and, accordingly, the selling stockholders do not have the right to acquire beneficial ownership of such shares.

(3) Based on 41,627,446 shares of our common stock outstanding on August 9, 2017.