
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 8-A

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(b) OR (g) OF
THE SECURITIES EXCHANGE ACT OF 1934**

Axcella Health Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation
or organization)

26-3321056
(I.R.S. Employer
Identification No.)

840 Memorial Drive
Cambridge, MA
(Address of principal executive offices)

02139
(Zip Code)

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

Title of each class to be so registered	Name of exchange on which each class is to be registered
Common Stock, \$0.001 par value per share	The Nasdaq Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), check the following box.

If this form relates to the registration of a class of securities concurrently with a Regulation A offering, check the following box.

Securities Act registration statement file number to which the form relates:
333-230822

Securities to be registered pursuant to Section 12(g) of the Act:
None
(Title of class)

Item 1. Description of Registrant's Securities to be Registered.

For a description of the common stock, \$0.001 par value per share, of Axcella Health Inc., a Delaware corporation (the "Registrant"), to be registered hereunder, reference is made to the information set forth under the heading "Description of Capital Stock" in the Registrant's prospectus that constitutes part of the Registrant's Registration Statement on Form S-1 (File No. 333-230822) (the "Registration Statement"), filed with the Securities and Exchange Commission (the "Commission"), which information is incorporated herein by reference. The description of the Common Stock included in any form of prospectus subsequently filed by the Registrant with the Commission pursuant to Rule 424(b) under the Securities Act shall be deemed to be incorporated by reference herein.

Item 2. Exhibits.

Under the "Instructions as to Exhibits" with respect to Form 8-A, no exhibits are required to be filed with this registration statement because no other securities of the Registrant are registered on The Nasdaq Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

AXCELLA HEALTH INC.

Date: May 7, 2019

By: /s/ William Hinshaw
William Hinshaw
Chief Executive Officer