
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13D

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No.)*

AXCELLA HEALTH INC.

(Name of Issuer)

Common Stock, \$0.001 par value per share
(Title of Class of Securities)

05454B105
(CUSIP Number)

Noubar B. Afeyan, Ph.D.
Flagship Pioneering
55 Cambridge Parkway, Suite 800E
Cambridge, MA 02142
(617) 868-1888

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 13, 2019
(Date of Event Which Requires Filing of Statement on Schedule 13D)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), checking the following box.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(1)	Name of Reporting Persons: Flagship VentureLabs IV, LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 2,035,830
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 2,035,830
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 2,035,830	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 8.9%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Flagship Ventures Fund IV, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 5,324,610
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 5,324,610
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 5,324,610	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 23.2%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Flagship Ventures Fund IV-Rx, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 676,752
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 676,752
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 676,752	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 2.9%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Flagship Ventures Fund IV General Partner LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 6,001,362
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 6,001,362
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 6,001,362	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 26.1%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Flagship Ventures Fund 2007, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 1,761,029
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 1,761,029
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 1,761,029	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 7.7%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Flagship Ventures 2007 General Partner LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 1,761,029
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 1,761,029
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 1,761,029	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 7.7%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Flagship Ventures Opportunities Fund I, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 986,023
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 986,023
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 986,023	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 4.3%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Flagship Ventures Opportunities Fund I General Partner LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 986,023
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 986,023
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 986,023	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 4.3%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Noubar B. Afeyan, Ph.D.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 8,748,414
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 8,748,414
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 8,748,414	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 38.1%	
(14)	Type of Reporting Person (See Instructions): IN	

(1)	Name of Reporting Persons: Edwin M. Kania, Jr.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 7,762,391
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 7,762,391
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 7,762,391	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 33.8%	
(14)	Type of Reporting Person (See Instructions): IN	

ITEM 1. SECURITY AND ISSUER

This Schedule 13D relates to the shares of common stock, \$0.001 par value per share ("Common Stock"), of Axcella Health Inc. (the "Issuer"). The address of the principal executive offices of the Issuer is 840 Memorial Drive, Cambridge, MA 02139.

ITEM 2. IDENTITY AND BACKGROUND

This Schedule 13D is being filed by the following persons (each a "Reporting Person"):

- i. Flagship VentureLabs IV, LLC, a Delaware limited liability company ("VentureLabs IV"). The manager of VentureLabs IV is Flagship Ventures Fund IV, L.P., a Delaware limited partnership ("Flagship Fund IV").
- ii. Flagship Fund IV. The general partner of Flagship Fund IV is Flagship Ventures Fund IV General Partner LLC, a Delaware limited liability company ("Flagship Fund IV GP").
- iii. Flagship Ventures Fund IV-Rx, L.P., a Delaware limited partnership ("Flagship Fund IV-Rx" and together with VentureLabs IV and Flagship Fund IV, the "Flagship IV Funds"). The general partner of Flagship Fund IV-Rx is Flagship Fund IV GP.
- iv. Flagship Fund IV GP. Noubar B. Afeyan, Ph.D. ("Dr. Afeyan") and Edwin M. Kania, Jr. ("Mr. Kania") are the managers of Flagship Fund IV GP.
- v. Flagship Ventures Fund 2007, L.P., a Delaware limited partnership ("Flagship Fund 2007"). The general partner of Flagship Fund 2007 is Flagship Ventures 2007 General Partner LLC, a Delaware limited liability company ("Flagship Fund 2007 GP").
- vi. Flagship Fund 2007 GP. Dr. Afeyan and Mr. Kania are the managers of Flagship Fund 2007 GP.
- vii. Flagship Ventures Opportunities Fund I, L.P., a Delaware limited partnership ("Flagship Opportunities I" and together with the Flagship IV Funds and Flagship Fund 2007, the "Flagship Funds"). The general partner of Flagship Opportunities I is Flagship Ventures Opportunities Fund I General Partner LLC, a Delaware limited liability company ("Flagship Opportunities GP").
- viii. Flagship Opportunities GP. Dr. Afeyan is the sole manager of Flagship Opportunities GP.
- ix. Dr. Afeyan, a citizen of the United States of America.
- x. Mr. Kania, a citizen of the United States of America

The principal business of each Reporting Person is the venture capital investment business. The principal business address of each Reporting Person is 55 Cambridge Parkway, Suite 800E, Cambridge, Massachusetts 02142.

During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

During the last five years, none of the Reporting Persons has been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding were or are subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

The Flagship Funds purchased the shares set forth in Item 5 using funds from working capital.

ITEM 4. PURPOSE OF TRANSACTION

The Reporting Persons acquired the shares of Common Stock set forth in Item 5 and hold their shares of Common Stock for investment purposes. Subject to a number of factors, including market conditions and their general investment and trading policies, the Reporting Persons may, in the ordinary course of their business, dispose of the shares of Common Stock that they beneficially own. These dispositions may occur in open market transactions, privately negotiated transactions or through other methods. Additionally, the Flagship Funds may distribute the shares of Common Stock that they directly hold to their respective limited partners.

David R. Epstein, who is an Executive Partner at Flagship Pioneering Inc., an affiliate of the Reporting Persons, is Chairman of the board of directors of the Issuer. David Berry, M.D., Ph.D., who is a General Partner at Flagship Pioneering, is a director of the Issuer.

The Reporting Persons, either directly or indirectly through Mr. Epstein and Dr. Berry, may engage in discussions from time to time with the Issuer's board of directors, the Issuer's management or the Issuer's other stockholders. These discussions may be with respect to (i) acquiring or disposing shares of Common Stock or other securities of the Issuer (collectively, the "Securities"); (ii) maintaining or changing the Issuer's business, operations, governance, management, strategy or capitalization; or (iii) implementing transactions that may relate to or may result in any matter set forth in paragraphs (a) through (j) of Item 4 of Schedule 13D. Additionally, the Reporting Persons may acquire additional Securities through open market transactions, privately negotiated transactions or other methods.

The information set forth in Item 6 below is incorporated by reference in its entirety into this Item 4.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

(a)-(b) The information set forth in rows 7 through 13 of the cover pages to this Schedule 13D is incorporated by reference. The percentage set forth in row 13 is based on 22,988,359 outstanding shares of Common Stock immediately following the Issuer's initial public offering, as reported in the Issuer's prospectus filed on May 9, 2019.

VentureLabs IV, Flagship Fund IV and Flagship Fund IV-Rx directly hold 2,035,830 shares, 3,288,780 shares and 676,752 shares of Common Stock, respectively. Flagship Fund IV, as the manager of VentureLabs IV, may be deemed to beneficially own the shares directly held by VentureLabs IV. Flagship Fund IV GP, as the general partner of the Flagship Fund IV Funds, may be deemed to beneficially own the shares directly held by the Flagship Fund IV Funds.

Flagship Fund 2007 directly holds 1,761,029 shares of Common Stock. Flagship Fund 2007 GP, as the general partner of Flagship Fund 2007, may be deemed to beneficially own the shares directly held by Flagship Fund 2007.

Flagship Opportunities I directly holds 986,023 shares of Common Stock. Flagship Opportunities GP, as the general partner of Flagship Opportunities I, may be deemed to beneficially own the shares directly held by Flagship Opportunities I.

Dr. Afeyan and Mr. Kania, as the managers of Flagship Fund IV GP and Flagship Fund 2007 GP, may be deemed to beneficially own the shares directly held by the Flagship Fund IV Funds and Flagship Fund 2007. While Mr. Kania is retired from Flagship Pioneering, he continues to serve as a manager of Flagship Fund IV GP and Flagship Fund 2007 GP. Dr. Afeyan, as the sole manager of Flagship Opportunities GP, may be deemed to beneficially own the shares directly held by Flagship Opportunities I.

(c) On May 13, 2019, Flagship Opportunities I purchased 500,000 shares of Common Stock in connection with the Issuer's initial public offering. The purchase price was \$20.00 per share. Also on May 13, 2019, each share of the Issuer's preferred stock held by the Flagship Funds was automatically converted into the Issuer's Common Stock on a one-for-1.842 basis upon the closing of the Issuer's initial public offering, resulting in the Flagship Funds receiving the following shares: 2,035,830 shares by VentureLabs IV, 3,288,780 shares by Flagship Fund IV, 676,752 shares by Flagship Fund IV-Rx, 1,761,029 shares by Flagship Fund 2007 and 986,023 shares by Flagship Opportunities I.

(d) Except as described herein, no other person has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, securities covered by this statement.

(e) Not applicable

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER

Registration rights

On November 30, 2018, the Flagship Funds entered into a fifth amended and restated investors' rights agreement with the Issuer (the "Investors' Rights Agreement"). The Investors' Rights Agreement provides for certain rights relating to the registration of the Common Stock held by the Flagship Funds and certain other holders (the "Registrable Securities") pursuant to the Securities Act of 1933, as amended (the "Securities Act").

Demand registration rights

Any time after November 4, 2019, the holders of the Registrable Securities are entitled to demand registration rights under certain conditions. Under the terms of the Investors' Rights Agreement, the Issuer will be required, upon the request of holders of a majority of the registrable securities to register registrable securities that would result in an aggregate offering price of at least \$5.0 million, to file a registration statement of all or a portion of these registrable securities for public resale. The Issuer is required to effect only two such registrations pursuant to this provision of the Investors' Rights Agreement.

Short-form registration rights

Pursuant to the Investors' Rights Agreement, if the Issuer is eligible to file a registration statement on Form S-3, upon the written request of holders of at least 20% of the registrable securities to register registrable securities that would result in an aggregate offering price of at least \$2.5 million, the Issuer will be required to file a registration statement on Form S-3 for such registrable securities subject to certain limitations. The Issuer is required to effect only two registrations in any twelve month period pursuant to this provision of the Investors' Rights Agreement. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Piggyback registration rights

Pursuant to the Investors' Rights Agreement, if the Issuer registers any of its securities either for its own account or for the account of other security holders, subject to certain exceptions, the holders of the Registrable Securities are entitled to include their shares in the registration. Subject to certain exceptions contained in the Investors' Rights Agreement, the Issuer and the underwriters may limit the number of shares included in the underwritten offering to the number of shares which the Issuer and the underwriters determine in their sole discretion will not jeopardize the success of the offering.

Indemnification

The Investors' Rights Agreement contains customary cross-indemnification provisions, under which the Issuer is obligated to indemnify holders of Registrable Securities in the event of material misstatements or omissions in the registration statement attributable to the Issuer, and the holders of Registrable Securities are obligated to indemnify the Issuer for material misstatements or omissions attributable to such holders.

Expiration of registration rights

The registration rights granted to any holder of Registrable Securities under the Investors' Rights Agreement will terminate upon the earliest to occur of (i) a deemed liquidation event (as defined in the Issuer's certificate of incorporation), (ii) the fifth anniversary of the completion of the initial public offering or (iii) such time after the initial public offering when such holder's shares may be sold without restriction pursuant to Rule 144 within a three month period.

The foregoing description of the Investors' Rights Agreement is qualified in its entirety by reference to the full text of the Investors' Rights Agreement, a copy of which is filed as Exhibit 2 hereto, and is incorporated by reference into this Item 6.

Lock-Up Agreement

In connection with the Issuer's initial public offering, the Flagship Funds entered into a lock-up agreement (the "Lock-Up Agreement") with Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC and SVB Leerink LLC. Pursuant to the terms of the Lock-Up Agreement, the Flagship Funds have agreed, with certain exceptions, during the period ending 180 days after April 12, 2019, not to

- offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of the Issuer's Common Stock or any securities convertible into or exercisable or exchangeable for the Issuer's Common Stock; or
- enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or such other securities.

The foregoing description of the Lock-Up Agreement is qualified in its entirety by reference to the full text of the Form of the Lock-Up Agreement, a copy of which is filed as Exhibit 3 hereto, and is incorporated by reference into this Item 6.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

- | | |
|-----------|--|
| Exhibit 1 | Joint Filing Agreement (filed herewith). |
| Exhibit 2 | Fifth Amended and Restated Investors' Rights Agreement among the Issuer, the Flagship Funds, and certain other investors named therein, dated November 30, 2018 (incorporated by reference to Exhibit 4.2 to the Issuer's Form S-1 filed on April 12, 2019). |
| Exhibit 3 | Lock-Up Agreement (incorporated by reference to Exhibit D-1 to Exhibit 1.1 to the Issuer's Amendment No. 1 to Form S-1 filed on April 30, 2019). |

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information set forth in this Statement is true, complete and correct.

Dated: May 23, 2019

FLAGSHIP VENTURELABS IV, LLC

By: Flagship Ventures Fund IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV-Rx, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV GENERAL PARTNER
LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND 2007, L.P.

By: Flagship Ventures 2007 General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES 2007 GENERAL PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES OPPORTUNITIES FUND I, L.P.

By: Flagship Ventures Opportunities Fund I General
Partner LLC

CUSIP No. 05454B105

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES OPPORTUNITIES FUND I
GENERAL PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

/s/ Noubar B. Afeyan, Ph.D.

NOUBAR B. AFEYAN, PH.D.

/s/ Edwin M. Kania, Jr.

EDWIN M. KANIA, JR.

JOINT FILING AGREEMENT

The persons below hereby agree that the Schedule 13D to which this agreement is attached as an exhibit, as well as all future amendments to such Schedule 13D, shall be filed jointly on behalf of each of them. This agreement is intended to satisfy the requirements of Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934.

Dated: May 23, 2019

FLAGSHIP VENTURELABS IV, LLC

By: Flagship Ventures Fund IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV-Rx, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV GENERAL PARTNER
LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND 2007, L.P.

By: Flagship Ventures 2007 General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES 2007 GENERAL PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES OPPORTUNITIES FUND I, L.P.

By: Flagship Ventures Opportunities Fund I General
Partner LLC

CUSIP No. 05454B105

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES OPPORTUNITIES FUND I
GENERAL PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

/s/ Noubar B. Afeyan, Ph.D.

NOUBAR B. AFEYAN, PH.D.

/s/ Edwin M. Kania, Jr.

EDWIN M. KANIA, JR.