
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment)*

Evelo Biosciences, Inc.

(Name of Issuer)

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

299734103
(CUSIP Number)

Noubar B. Afeyan, Ph.D.
Flagship Pioneering Inc.
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 11, 2018
(Date of Event Which Requires Filing of this Statement)

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), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7 for other parties to whom copies are to be sent.

* 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, as amended ("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.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 684,372
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 684,372
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 684,372	
12.	Check 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) 2.1%	
14.	Type of Reporting Person (See Instructions) OO	

1.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 2,521,208
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,521,208
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,521,208	
12.	Check 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) 7.9%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 448,911
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 448,911
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 448,911	
12.	Check 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) 1.4%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check 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 2,970,119
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,970,119
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,970,119	
12.	Check 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) 9.3%	
14.	Type of Reporting Person (See Instructions) OO	

1.	Names of Reporting Persons. Flagship VentureLabs V LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 2,645,637
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,645,637
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,645,637	
12.	Check 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) 8.3%	
14.	Type of Reporting Person (See Instructions) OO	

1.	Names of Reporting Persons. Flagship Ventures Fund V, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 6,846,921
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 6,846,921
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 6,846,921	
12.	Check 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) 21.5%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Flagship V VentureLabs Rx Fund, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 1,609,871
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,609,871
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,609,871	
12.	Check 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) 5.1%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Nutritional Health Side Fund, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 795,950
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 795,950
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 795,950	
12.	Check 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) 2.5%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Nutritional Health Disruptive Innovation Fund, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 3,598,177
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 3,598,177
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,598,177	
12.	Check 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) 11.3%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names of Reporting Persons. Flagship Ventures Fund V General Partner LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check 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 12,850,919
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 12,850,919
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 12,850,919	
12.	Check 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) 40.3%	
14.	Type of Reporting Person (See Instructions) OO	

1.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check 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 2,412,365
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,412,365
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,412,365	
12.	Check 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) 7.6%	
14.	Type of Reporting Person (See Instructions) PN	

1.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check 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 2,412,365
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,412,365
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,412,365	
12.	Check 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) 7.6%	
14.	Type of Reporting Person (See Instructions) OO	

1.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check 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 18,233,403
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 18,233,403
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 18,233,403	
12.	Check 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) 57.2%	
14.	Type of Reporting Person (See Instructions) IN	

1.	Names 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 type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check 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 2,970,119
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,970,119
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,970,119	
12.	Check 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) 9.3%	
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 Evelo Biosciences, Inc. (the “Issuer”). The address of the principal executive offices of the Issuer is 620 Memorial Drive, Suite 200, Cambridge, Massachusetts 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 (“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 Fund IV Funds”). Flagship Fund IV GP is the general partner of Flagship Fund IV-Rx.
- iv. Flagship Fund IV GP. Noubar B. Afeyan, Ph.D. (“Dr. Afeyan”) and Edwin M. Kania, Jr. (“Mr. Kania”) are the managers of Flagship IV GP.
- v. Flagship VentureLabs V LLC, a Delaware limited liability company (“VentureLabs V”). The manager of VentureLabs V is Flagship Ventures Fund V, L.P. (“Flagship Fund V”), a Delaware limited partnership.
- vi. Flagship Fund V. The general partner of Flagship Fund V is Flagship Ventures Fund V General Partner LLC, a Delaware limited liability company (“Flagship Fund V GP”).
- vii. Flagship V VentureLabs Rx Fund, L.P., a Delaware limited partnership (“VentureLabs Rx V”). Flagship Fund V GP is the general partner of VentureLabs Rx V.
- viii. Nutritional Health Side Fund, L.P., a Delaware limited partnership (“Nutritional Health Side Fund”). Flagship Fund V GP is the general partner of Nutritional Health Side Fund.
- ix. Nutritional Health Disruptive Innovation Fund, L.P., a Delaware limited partnership (“Nutritional Innovation Fund,” and together with VentureLabs V, Flagship Fund V, VentureLabs Rx V and Nutritional Health Side Fund, the “Flagship Fund V Funds”). Flagship Fund V GP is the general partner of Nutritional Innovation Fund.
- x. Flagship Fund V GP. Dr. Afeyan is the managing member of Flagship Fund V GP.
- xi. Flagship Ventures Opportunities Fund I, L.P., a Delaware limited partnership (“Flagship Opportunities I,” and, together with the Flagship Fund IV Funds and the Flagship Fund V Funds, 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”).
- xii. Flagship Opportunities GP. Dr. Afeyan is the managing member of Flagship Opportunities GP.
- xiii. Dr. Afeyan, a citizen of the United States of America.
- xiv. 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, an affiliate of the Reporting Persons, is a director of the Issuer, and Dr. Afeyan is co-founder, director and chairman of the board of directors of the Issuer. The Reporting Persons, either directly or indirectly through Mr. Epstein and Dr. Afeyan, 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 31,870,854 outstanding shares of Common Stock immediately following the Issuer's initial public offering, as reported in the Issuer's prospectus filed on May 9, 2018.

VentureLabs IV, Flagship Fund IV, and Flagship Fund IV-Rx directly hold 684,372 shares, 1,836,836 shares and 448,911 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.

VentureLabs V, Flagship Fund V, VentureLabs Rx V, Nutritional Health Side Fund, and Nutritional Innovation Fund directly hold 2,645,637 shares, 4,201,284 shares, 1,609,871 shares, 795,950 shares, and 3,598,177 shares of Common Stock, respectively. Flagship Fund V, as the manager of VentureLabs V, may be deemed to beneficially own the shares directly held by VentureLabs V. Flagship Fund V GP, as the general partner of the Flagship Fund V Funds, may be deemed to beneficially own the shares directly held by the Flagship Fund V Funds.

Flagship Opportunities I directly holds 2,412,365 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, may be deemed to beneficially own the shares directly held by the Flagship Fund IV Funds. Dr. Afeyan, as the managing members of Flagship Fund V GP and Flagship Opportunities GP, may be deemed to beneficially own the shares directly held by the Flagship Fund V Funds and Flagship Opportunities I.

(c) On May 11, 2018, National Health Side Fund, Nutritional Innovation Fund, and Flagship Opportunities Fund purchased 35,156 shares, 105,469 shares, and 140,625 shares, respectively, for an aggregate of 281,250 shares of Common Stock in connection with the Issuer's initial public offering. The purchase price was \$16.00 per share. Also on May 11, 2018, each share of the Issuer's preferred stock held by the Flagship Funds was automatically converted into the Issuer's common stock on a 0.2452-for-one basis upon the closing of the Issuer's initial public offering, resulting the Flagship Funds receiving the following shares: 1,836,836 shares by Flagship Fund IV, 448,911 shares by Flagship Fund IV-Rx, 4,201,284 shares by Flagship Fund V, 1,609,871 shares by VentureLabs Rx V, 760,794 shares by Nutritional Health Side Fund, 3,492,708 shares by Nutritional Innovation Fund, and 2,271,740 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

Investors' Rights Agreement – Registration Rights

On February 9, 2018, the Flagship Funds entered into a fourth amended and restated investors' rights agreement with the Issuer (the "Investors' Rights Agreement"). The Investors' Rights Agreement was amended on April 30, 2018, and provides for certain rights relating to the registration of the Common Stock held by the Flagship Funds pursuant to the Securities Act of 1933, as amended (the "Securities Act").

If at any time beginning 180 days after May 9, 2018, the holders of a majority of the Registrable Securities (as defined in the Investors' Rights Agreement) request in writing that the Issuer effect a registration with respect to all or part of such registrable securities then outstanding, the Issuer may be required to register the shares. The Issuer is obligated to effect at most two registrations in response to these demand registration rights. If the holders requesting registration intend to distribute their shares by means of an underwriting, the managing underwriter of such offering will have the right to limit the numbers of shares to be underwritten for reasons related to the marketing of the shares.

Piggyback Registration Rights

If at any time the Issuer proposes to register any shares of its Common Stock under the Securities Act, subject to certain exceptions, the holders of registrable securities will be entitled to notice of the registration and to include their shares of registrable securities in the registration. If the Issuer's proposed registration involves an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Form S-3 Registration Rights

If, at any time after the Issuer becomes entitled under the Securities Act to register its shares of Common Stock on a registration statement on Form S-3, the holders of at least 30% of the Registrable Securities then outstanding request in writing that the Issuer effect a registration with respect to registrable securities at an aggregate price to the public in the offering of at least \$5,000,000, the Issuer will be required to effect such registration; provided, however, that the Issuer will not be required to effect such a registration if, within the twelve month period preceding such request, the Issuer has already effected two registrations on Form S-3 for the holders of Registrable Securities.

Expenses

Ordinarily, other than underwriting discounts and commissions, The Issuer will be required to pay all expenses incurred by the Issuer related to any registration effected pursuant to the exercise of the registration rights pursuant to the Investors' Rights Agreement. These expenses may include all registration and filing fees, printing expenses, fees and disbursements of the Issuer's counsel, reasonable fees and disbursements of a counsel for the selling security holders and blue sky fees and expenses.

Termination of Registration Rights

The registration rights terminate upon the earlier of seven years after May 9, 2018, the closing of a deemed liquidation event, as defined in the Investors' Rights Agreement, or, with respect to the registration rights of an individual holder, when the holder can sell all of such holder's registrable securities in a three-month period without restriction under Rule 144 under the Securities Act.

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 Morgan Stanley & Co., LLC and Cowen and Company, 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 May 9, 2018, not to

- offer, pledge, 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, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise.

Item 7. Material to be Filed as Exhibits

Exhibit 1 Joint Filing Agreement (filed herewith)

Exhibit 2 Fourth Amended and Restated Investors' Rights Agreement, dated February 9, 2018, by and among the Issuer, the Flagship Funds, and certain other investors named therein, as amended on April 30, 2018 (incorporated by reference to Exhibit 4.1 to the Issuer's Form S-1 filed on April 30, 2018)

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: May 21, 2018

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 VENTURELABS V LLC

By: Flagship Ventures Fund V, L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND V, L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP V VENTURLABs RX FUND, L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

NUTRITIONAL HEALTH SIDE FUND, L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

NUTRITIONAL HEALTH DISRUPTIVE INNOVATION FUND,
L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND V 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

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 21, 2018

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 VENTURELABS V LLC

By: Flagship Ventures Fund V, L.P.

By: Flagship Ventures Fund V General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.
Name: Noubar B. Afeyan, Ph.D.
Title: Manager

FLAGSHIP VENTURES FUND V, L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP V VENTURLABs RX FUND, L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

NUTRITIONAL HEALTH SIDE FUND, L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

NUTRITIONAL HEALTH DISRUPTIVE INNOVATION FUND,
L.P.

By: Flagship Ventures Fund V General Partner LLC

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

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND V 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

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.