

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Flagship Ventures Fund IV General Partner LLC</u> (Last) (First) (Middle) 55 CAMBRIDGE PARKWAY, SUITE 800E (Street) CAMBRIDGE MA 02142 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 05/08/2018	3. Issuer Name and Ticker or Trading Symbol <u>Evelo Biosciences, Inc. [EVLO]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	3,330,009	I	See footnotes ⁽¹⁾⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series A Preferred Stock	(2)	(2)	Common Stock	3,073,533	(2)	I	See footnotes ⁽³⁾⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾
Series A-1 Preferred Stock	(2)	(2)	Common Stock	2,476,600	(2)	I	See footnotes ⁽⁴⁾⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾
Series A-2 Preferred Stock	(2)	(2)	Common Stock	1,327,939	(2)	I	See footnotes ⁽⁵⁾⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾
Series A-3 Preferred Stock	(2)	(2)	Common Stock	2,042,902	(2)	I	See footnotes ⁽⁶⁾⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾
Series B Preferred Stock	(2)	(2)	Common Stock	4,562,664	(2)	I	See footnotes ⁽⁷⁾⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾
Series C Preferred Stock	(2)	(2)	Common Stock	1,138,505	(2)	I	See footnotes ⁽⁸⁾⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾

1. Name and Address of Reporting Person* <u>Flagship Ventures Fund IV General Partner LLC</u> (Last) (First) (Middle) 55 CAMBRIDGE PARKWAY, SUITE 800E (Street) CAMBRIDGE MA 02142 (City) (State) (Zip)		
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1. Name and Address of Reporting Person* <u>Flagship VentureLabs IV, LLC</u> (Last) (First) (Middle) 55 CAMBRIDGE PARKWAY, SUITE 800E (Street) CAMBRIDGE MA 02142 (City) (State) (Zip)		
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1. Name and Address of Reporting Person*

[Flagship Ventures Fund IV, L.P.](#)

(Last) (First) (Middle)

55 CAMBRIDGE PARKWAY, SUITE 800E

(Street)

CAMBRIDGE MA 02142

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[Flagship Ventures Fund IV-Rx, L.P.](#)

(Last) (First) (Middle)

55 CAMBRIDGE PARKWAY, SUITE 800E

(Street)

CAMBRIDGE MA 02142

(City) (State) (Zip)

Explanation of Responses:

1. Includes 684,372 shares held by Flagship VentureLabs IV LLC ("VentureLabs IV") and 2,645,637 shares held by Flagship VentureLabs V LLC ("VentureLabs V").
2. The preferred stock is convertible into the Issuer's common stock on a 0.2452-for-one basis at the holder's election and has no expiration date. The preferred stock will automatically convert into common stock upon the closing of the Issuer's initial public offering.
3. Includes Series A Preferred Stock convertible into 2,554,616 shares of common stock by Flagship Ventures Fund V, L.P. ("Flagship Fund V"), 314,619 shares of common stock by Flagship V VentureLabs Rx Fund, L.P. ("VentureLabs Rx V") and 204,298 shares of common stock by Nutritional Health Side Fund, L.P. ("Nutritional Health Side Fund").
4. Includes Series A-1 Preferred Stock convertible into 1,019,675 shares of common stock by Flagship Ventures Fund IV L.P. ("Flagship Fund IV"), 244,621 shares of common stock by Flagship Ventures Fund IV-Rx, L.P. ("Flagship Fund IV-Rx") and, together with VentureLabs IV and Flagship Fund IV, the "Flagship Fund IV Funds", 303,076 shares of common stock by Flagship Fund V and 909,228 shares of common stock by Nutritional Health Disruptive Innovation Fund, L.P. ("Nutritional Innovation Fund") and, together with VentureLabs V, Flagship Fund V, VentureLabs Rx V and Nutritional Health Side Fund, the "Flagship Fund V Funds").
5. Includes Series A-2 Preferred Stock convertible into 747,732 shares of common stock by Flagship Fund V, 478,058 shares of common stock by VentureLabs Rx V and 102,149 shares of common stock by Nutritional Health Side Fund.
6. Includes Series A-3 Preferred Stock convertible into 817,161 shares of common stock by Flagship Fund IV, 204,290 shares of common stock by Flagship Fund IV-Rx, 255,362 shares of common stock by Flagship Fund V and 766,089 shares of common stock by Nutritional Innovation Fund.
7. Includes Series B Preferred Stock convertible into 340,497 shares of common stock by Flagship Fund V, 817,194 shares of common stock by VentureLabs Rx V, 1,361,989 shares of common stock by Nutritional Innovation Fund, 1,702,487 shares of common stock by Flagship Ventures Opportunities Fund I, L.P. ("Flagship Opportunities I") and, together with the Flagship Fund IV Funds and Flagship Fund V Funds, the "Flagship Funds") and 340,497 shares of common stock by Nutritional Health Side Fund.
8. Includes Series C Preferred Stock convertible into 569,253 shares of common stock by Flagship Opportunities I, 455,402 shares of common stock by Nutritional Innovation Fund and 113,850 shares of common stock by Nutritional Health Side Fund.
9. Flagship Fund IV is a member of Flagship VentureLabs IV and also serves as its manager. Flagship Fund V is a member of Flagship VentureLabs V and also serves as its manager.
10. The general partner of each of Flagship Fund IV and Flagship Fund IV-Rx is Flagship Ventures Fund IV General Partner LLC ("Flagship Fund IV GP"). The general partner of Flagship Fund V, Flagship VentureLabs V-Rx, Nutritional Innovation Fund and Nutritional Health Side Fund is Flagship Ventures Fund V General Partner LLC ("Flagship Fund V GP"). The general partner of Flagship Opportunities Fund I is Flagship Ventures Opportunities Fund I General Partner LLC ("Flagship Opportunities GP," and together with Flagship Fund IV GP and Flagship Fund V GP, the "Flagship General Partners").
11. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship Fund IV GP and each of these individuals may be deemed to share voting and investment power with respect to all shares held by Flagship Fund IV Funds. Dr. Afeyan also serves as the managing member of the Flagship Fund V GP and Flagship Opportunities Fund GP and may be deemed to possess sole voting and investment control over the shares held by the Flagship Fund V Funds and Flagship Opportunities Fund I. Each of the Flagship General Partners, Dr. Afeyan and Mr. Kania disclaims beneficial ownership of any shares beneficially owned by the Flagship Funds except to the extent of its or his pecuniary interest therein.

Remarks:

Due to the limitations of the electronic filing system each of Flagship Ventures Fund V General Partner LLC, Flagship VentureLabs V LLC, Flagship Ventures Fund V, L.P., Flagship V VentureLabs Rx Fund, L.P., Nutritional Health Disruptive Innovation Fund, L.P., Nutritional Health Side Fund, L.P., Flagship Ventures Opportunities Fund I, L.P., Flagship Ventures Opportunities Fund I General Partner LLC, Noubar B. Afeyan and Edwin M. Kania, Jr. are filing a separate Form 3.

[Flagship Ventures Fund IV](#)
[General Partner LLC, By: /s/](#)
[Noubar B. Afeyan, Name: 05/08/2018](#)
[Noubar B. Afeyan, Ph.D.,](#)
[Title: Manager](#)
[Flagship VentureLabs IV LLC,](#)
[By: Flagship Ventures Fund IV,](#)
[L.P., its manager, By: Flagship](#)
[Ventures Fund IV General](#)
[Partner LLC, its general](#)
[partner, By: /s/ Noubar B.](#)
[Afeyan, Name: Noubar B.](#)
[Afeyan, Ph.D., Title: Manager](#)
[Flagship Ventures Fund IV,](#)
[L.P., By: Flagship Ventures](#)
[Fund IV General Partner LLC,](#)
[its general partner, By: /s/ 05/08/2018](#)
[Noubar B. Afeyan, Name:](#)
[Noubar B. Afeyan, Ph.D.,](#)
[Title: Manager](#)
[Flagship Ventures Fund IV-Rx, 05/08/2018](#)
[L.P., By: Flagship Ventures](#)
[Fund IV General Partner LLC,](#)
[its general partner, By: /s/](#)
[Noubar B. Afeyan, Name:](#)

Noubar B. Afeyan, Ph.D.,

Title: Manager

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 5 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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