

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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 V General Partner LLC</u> (Last) (First) (Middle) 55 CAMBRIDGE PARKWAY, SUITE 800E (Street) CAMBRIDGE MA 02142 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Evelo Biosciences, Inc. [EVLO]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 05/11/2018	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	05/11/2018		C		14,622,143	A	\$0.00	17,952,153	I	See footnotes (1)(2)(3)(4)(5)
Common Stock	05/11/2018		P		281,250 ⁽⁶⁾	A	\$16	18,233,403	I	See footnotes (1)(2)(3)(4)(5)

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Series A Preferred Stock	(7)	05/11/2018		C		12,536,945		(7)	(7)	Common Stock	3,073,533	\$0.00	0	I	See footnotes (1)(2)(3)(4)(5)
Series A-1 Preferred Stock	(7)	05/11/2018		C		10,102,055		(7)	(7)	Common Stock	2,476,600	\$0.00	0	I	See footnotes (1)(2)(3)(4)(5)
Series A-2 Preferred Stock	(7)	05/11/2018		C		5,416,667		(7)	(7)	Common Stock	1,327,939	\$0.00	0	I	See footnotes (1)(2)(3)(4)(5)
Series A-3 Preferred Stock	(7)	05/11/2018		C		8,333,000		(7)	(7)	Common Stock	2,042,902	\$0.00	0	I	See footnotes (1)(2)(3)(4)(5)
Series B Preferred Stock	(7)	05/11/2018		C		18,611,110		(7)	(7)	Common Stock	4,562,664	\$0.00	0	I	See footnotes (1)(2)(3)(4)(5)
Series C Preferred Stock	(7)	05/11/2018		C		4,643,963		(7)	(7)	Common Stock	1,138,505	\$0.00	0	I	See footnotes (1)(2)(3)(4)(5)

1. Name and Address of Reporting Person*

[Flagship Ventures Fund V General Partner LLC](#)

(Last) (First) (Middle)
55 CAMBRIDGE PARKWAY, SUITE 800E

(Street)
CAMBRIDGE MA 02142

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[Flagship VentureLabs V LLC](#)

(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 V, 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 V VentureLabs Rx Fund, L.P.](#)

(Last) (First) (Middle)
55 CAMBRIDGE PARKWAY, SUITE 800E

(Street)
CAMBRIDGE MA 02142

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[Nutritional Health Disruptive Innovation Fund, L.P.](#)

(Last) (First) (Middle)
55 CAMBRIDGE PARKWAY, SUITE 800E

(Street)
CAMBRIDGE MA 02142

(City) (State) (Zip)

1. Name and Address of Reporting Person*		
Nutritional Health Side Fund, 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 Opportunities Fund I, 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 Opportunities Fund I General Partner LLC		
(Last)	(First)	(Middle)
55 CAMBRIDGE PARKWAY, SUITE 800E		
(Street)		
CAMBRIDGE	MA	02142
(City) (State) (Zip)		
1. Name and Address of Reporting Person*		
AFEYAN NOUBAR		
(Last)	(First)	(Middle)
55 CAMBRIDGE PARKWAY, SUITE 800E		
(Street)		
CAMBRIDGE	MA	02142
(City) (State) (Zip)		
1. Name and Address of Reporting Person*		
KANIA EDWIN M JR		
(Last)	(First)	(Middle)
55 CAMBRIDGE PARKWAY, SUITE 800E		
(Street)		
CAMBRIDGE	MA	02142
(City) (State) (Zip)		

Explanation of Responses:

1. Following the transactions reported herein, Flagship VentureLabs IV LLC ("VentureLabs IV") holds 684,372 shares of common stock, Flagship VentureLabs V LLC ("VentureLabs V") holds 2,645,637 shares of common stock, Flagship Ventures Fund IV L.P. ("Flagship Fund IV") holds 1,836,836 shares of common stock, 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") holds 448,911 shares of common stock, Flagship Ventures Fund V, L.P. ("Flagship Fund V") holds 4,201,284 shares of common stock, Flagship V VentureLabs Rx Fund, L.P. ("VentureLabs Rx V") holds 1,609,871 shares of common stock, Nutritional Health Side Fund, L.P. ("Nutritional Health Side Fund") holds 795,950 shares of common stock,

2. [Continued] 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") holds 3,598,177 shares of common stock, and 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") holds 2,412,365 shares of common stock.

3. Flagship Fund IV is a member of VentureLabs IV and also serves as its manager. Flagship Fund V is a member of VentureLabs V and also serves as its manager.

4. 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, VentureLabs Rx-V, 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").

5. 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.

6. Includes 35,156, 105,469, and 140,625 shares purchased by Nutritional Health Side Fund, Nutritional Innovation Fund, and Flagship Opportunities I, respectively, in connection with the Issuer's initial public offering.

7. Upon closing of the Issuer's initial public offering, each share of preferred stock was automatically converted into the Issuer's common stock on a 0.2452-for-one basis.

Remarks:

Due to the limitations of the electronic filing system each of Flagship Ventures Fund IV General Partner LLC, Flagship VentureLabs IV LLC, Flagship Ventures Fund IV, L.P. and Flagship Ventures Fund IV-Rx, L.P. are filing a separate Form 4.

Flagship Ventures Fund V
General Partner LLC, By: /s/
Noubar B. Afeyan, Name: 05/15/2018
Noubar B. Afeyan, Title:
Manager

Flagship VentureLabs V LLC,
By: Flagship Ventures Fund
V, L.P., its manager, By:
Flagship Ventures Fund V
General Partner LLC, its 05/15/2018
general partner, By: /s/ Noubar
B. Afeyan, Name: Noubar B.
Afeyan, Title: Manager:

Flagship Ventures Fund V,
L.P., By: Flagship Ventures
Fund V General Partner LLC,
its general partner, By: /s/ 05/15/2018
Noubar B. Afeyan, Name:
Noubar B. Afeyan, Title:
Manager

Flagship V VentureLabs Rx
Fund, L.P., By: Flagship
Ventures Fund V General
Partner LLC, its general 05/15/2018
partner, By: /s/ Noubar B.
Afeyan, Name: Noubar B.
Afeyan, Title: Manager

Nutritional Health Disruptive
Innovation Fund, L.P., By:
Flagship Ventures Fund V
General Partner LLC, its 05/15/2018
general partner, By: /s/ Noubar
B. Afeyan, Name: Noubar B.
Afeyan, Title: Manager

Nutritional Health Side Fund,
L.P., By: Flagship Ventures
Fund V General Partner LLC,
its general partner, By: /s/ 05/15/2018
Noubar B. Afeyan, Name:
Noubar B. Afeyan, Title:
Manager

Flagship Ventures
Opprtunities Fund I, L.P., By:
Flagship Ventures
Opportunities Fund I General 05/15/2018
Partner LLC, its general
partner, By: /s/ Noubar B.
Afeyan, Name: Noubar B.
Afeyan, Title: Manager

Flagship Ventures
Opportunities Fund I General
Partner LLC, By: /s/ Noubar B. 05/15/2018
Afeyan, Name: Noubar B.
Afeyan, Title: Manager

Noubar B. Afeyan, Ph.D., /s/ 05/15/2018
Noubar B. Afeyan

Edwin M. Kania, Jr. /s/ Edwin 05/15/2018
M. Kania, Jr.

** 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 4 (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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.