

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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 2004 L P</u> (Last) (First) (Middle) <u>ONE MEMORIAL DRIVE</u> <u>7TH FLOOR</u> (Street) <u>CAMBRIDGE MA 02142</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>T2 Biosystems, Inc. [TTOO]</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) <u>08/12/2014</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

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	08/12/2014		C		1,632,816	A	\$0 ⁽¹⁾	1,632,816	I	See footnote ⁽²⁾
Common Stock	08/12/2014		C		741,755	A	\$0 ⁽¹⁾	2,374,571	I	See footnote ⁽³⁾

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	Amount or Number of Shares				
Series A-1 Convertible Preferred Stock	\$0 ⁽¹⁾	08/12/2014		C			128,567	(1)	(1)	Common Stock	75,627	\$0 ⁽¹⁾	0	I	See footnote ⁽²⁾
Series A-2 Convertible Preferred Stock	\$0 ⁽¹⁾	08/12/2014		C			774,527	(1)	(1)	Common Stock	455,604	\$0 ⁽¹⁾	0	I	See footnote ⁽²⁾
Series B Convertible Preferred Stock	\$0 ⁽¹⁾	08/12/2014		C			1,053,201	(1)	(1)	Common Stock	619,530	\$0 ⁽¹⁾	0	I	See footnote ⁽²⁾
Series C Convertible Preferred Stock	\$0 ⁽¹⁾	08/12/2014		C			819,493	(1)	(1)	Common Stock	482,054	\$0 ⁽¹⁾	0	I	See footnote ⁽²⁾
Series D Convertible Preferred Stock	\$0 ⁽¹⁾	08/12/2014		C			629,851	(1)	(1)	Common Stock	370,500	\$0 ⁽¹⁾	0	I	See footnote ⁽³⁾
Series E Convertible Preferred Stock	\$0 ⁽¹⁾	08/12/2014		C			631,133	(1)	(1)	Common Stock	371,254	\$0 ⁽¹⁾	0	I	See footnote ⁽³⁾

1. Name and Address of Reporting Person* <u>Flagship Ventures Fund 2004 L P</u> (Last) (First) (Middle) <u>ONE MEMORIAL DRIVE</u> <u>7TH FLOOR</u> (Street) <u>CAMBRIDGE MA 02142</u> (City) (State) (Zip)		
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1. Name and Address of Reporting Person*

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

(Last) (First) (Middle)

ONE MEMORIAL DRIVE
7TH FLOOR

(Street)

CAMBRIDGE MA 02142

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[Flagship Ventures General Partner LLC](#)

(Last) (First) (Middle)

C/O FLAGSHIP VENTURES
ONE MEMORIAL DRIVE, 7TH FLOOR

(Street)

CAMBRIDGE MA 02142

(City) (State) (Zip)

1. Name and Address of Reporting Person*

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

(Last) (First) (Middle)

ONE MEMORIAL DRIVE
7TH FLOOR

(Street)

CAMBRIDGE MA 02142

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[AFEYAN NOUBAR](#)

(Last) (First) (Middle)

1 SUNSET RIDGE

(Street)

LEXINGTON MA 02173

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[KANIA EDWIN M JR](#)

(Last) (First) (Middle)

(Street)

(City) (State) (Zip)

Explanation of Responses:

1. The preferred stock is convertible at any time, at the holder's election and has no expiration date. The preferred stock automatically converted into common stock upon the closing of the Issuer's initial public offering.
2. Held by Flagship Ventures Fund 2004, L.P. ("Flagship 2004"). Flagship Ventures General Partner LLC ("Flagship LLC") is the general partner of Flagship 2004. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship LLC. Flagship LLC and each of these individuals may be deemed to share voting and investment power with respect to all shares held by Flagship 2004. Each of the filing persons disclaims beneficial ownership of the shares except to the extent of his or its pecuniary interest therein.
3. Held by Flagship Ventures Fund IV, L.P. ("Flagship IV"). Flagship Ventures Fund IV General Partner LLC ("Flagship IV LLC") is the general partner of Flagship IV. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship IV LLC. Flagship IV LLC and each of these individuals may be deemed to share voting and investment power with respect to all shares held by Flagship IV. Each of the filing persons disclaims beneficial ownership of the shares except to the extent of his or its pecuniary interest therein.

[FLAGSHIP VENTURES
FUND 2004, L.P. By: Flagship
Ventures General Partner LLC](#) 08/13/2014
[By: /s/ Noubar B. Afeyan,
Ph.D., Manager](#)
[FLAGSHIP VENTURES](#) 08/13/2014
[FUND IV, L.P. By: Flagship
Ventures Fund IV General](#)

Partner LLC By: /s/ Noubar B. Afeyan, Ph.D., Manager
FLAGSHIP VENTURES
GENERAL PARTNER LLC By: /s/ Noubar B. Afeyan, Ph.D., Manager 08/13/2014
FLAGSHIP VENTURES
FUND IV GENERAL 08/13/2014
PARTNER LLC By: /s/ Noubar B. Afeyan, Ph.D., Manager
/s/ Noubar B. Afeyan, Ph.D. 08/13/2014
/s/ Edwin M. Kania Jr. 08/13/2014
** 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.

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