

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM S-8**

**REGISTRATION STATEMENT  
Under  
The Securities Act of 1933**

**T2 BIOSYSTEMS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation or organization)

**20-4827488**  
(IRS Employer Identification No.)

**101 Hartwell Avenue  
Lexington, Massachusetts 02421**  
(Address of principal executive offices) (Zip code)

**T2 Biosystems, Inc. Amended and Restated 2006 Employee, Director and Consultant Stock Plan  
T2 Biosystems, Inc. 2014 Incentive Award Plan  
T2 Biosystems, Inc. 2014 Employee Stock Purchase Plan**  
(Full title of the plans)

**John McDonough  
President and Chief Executive Officer  
T2 Biosystems, Inc.  
101 Hartwell Avenue  
Lexington, Massachusetts 02421  
(781) 457-1200**

**Copy to:**

**Johan V. Brigham  
Peter N. Handrinos  
Latham & Watkins LLP  
John Hancock Tower  
200 Clarendon Street  
Boston, MA 02116  
(617) 948-6060**

(Name and address of agent for service)  
(Telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer   
(Do not check if a smaller reporting company)

Smaller reporting company

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.001 per share	2,646,250 shares(2)	\$ 3.92(3)	\$ 10,373,300	\$ 1,336.08
Common Stock, par value \$0.001 per share	661,764 shares(4)	\$ 11.00(5)	\$ 7,279,404	\$ 937.59
Common Stock, par value \$0.001 per share	2,470,587 shares(6)	\$ 11.00(7)	\$ 27,176,457	\$ 3,500.33

- (1) Pursuant to Rule 416(a) and Rule 416(b) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover additional shares of the Registrant's Common Stock, par value \$0.001 per share ("Common Stock"), which become issuable under the T2 Biosystems, Inc. Amended and Restated 2006 Employee, Director and Consultant Stock Plan (as amended, the "2006 Plan"), the T2 Biosystems, Inc. 2014 Incentive Award Plan (the "2014 Plan"), and the T2 Biosystems, Inc. 2014 Employee Stock Purchase Plan (the "ESPP") by reason of any stock split, stock dividend, recapitalization or other similar transaction.
- (2) Represents 2,646,250 shares of Common Stock subject to outstanding stock options under the 2006 Plan as of August 6, 2014. To the extent stock options outstanding under the 2006 Plan are forfeited, lapse unexercised or are settled in cash, the shares of Common Stock subject to the stock options will be available for future issuance under the 2014 Plan.
- (3) Estimated in accordance with Rule 457(h) of the Securities Act solely for the purpose of calculating the registration fee on the basis of the weighted average exercise price of \$3.92 per share for outstanding stock options granted under the 2006 Plan.
- (4) Represents 661,764 shares of Common Stock available for future issuance under the ESPP, which number consists of (a) 220,588 shares of Common Stock initially available for issuance under the ESPP and (b) an additional 441,176 shares of Common Stock that may become issuable under the ESPP pursuant to its terms.
- (5) With respect to shares available for future issuance, estimated in accordance with Rule 457(c) and 457(h) of the Securities Act for purposes of calculating the registration fee, the Proposed Maximum Offering Price Per Share is \$11.00, which is the initial public offering price set forth on the cover page of the Registrant's prospectus dated August 6, 2014, relating to its initial public offering of Common Stock.
- (6) Represents 2,470,587 shares of Common Stock available for future issuance under the 2014 Plan, which number consists of (a) 823,529 shares of Common Stock initially available for issuance under the 2014 Plan and (b) an additional 1,647,058 shares of Common Stock that may become issuable under the 2014 Plan pursuant to its terms.
- (7) With respect to shares available for future issuance, estimated in accordance with Rule 457(c) and 457(h) of the Securities Act for purposes of calculating the registration fee, the Proposed Maximum Offering Price Per Share is \$11.00, which is the initial public offering price set forth on the cover page of the Registrant's prospectus dated August 6, 2014, relating to its initial public offering of Common Stock.

**PART I**

**INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS**

The information called for in Part I of Form S-8 is not being filed with or included in this Registration Statement (by incorporation by reference or otherwise) in accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission").

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the Commission by T2 Biosystems, Inc. (the "Registrant"), pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as applicable, are hereby incorporated by reference in, and shall be deemed to be a part of, this Registration Statement:

(a) the Registrant's prospectus filed with the Commission pursuant to Rule 424(b) promulgated under the Securities Act on August 7, 2014, in connection with the registration statement on Form S-1, as amended (File No. 333-197193), in which there is set forth the audited financial statements for the Registrant's fiscal year ended December 31, 2013; and

(b) the description of the Registrant's Common Stock contained in the prospectus included in the Registrant's registration statement on Form S-1, as amended (File No. 333-197193), which description is incorporated by reference into the Form 8-A filed with the Commission on July 25, 2014, pursuant to the Exchange Act, and any amendment or report filed for the purpose of further updating such description.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents.

Any statement contained in this Registration Statement, in an amendment hereto or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed amendment to this Registration Statement or in any document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement, except as to specific section of such statements as set forth therein.

Under no circumstances shall any information furnished under Item 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

#### Item 4. Description of Securities.

Not applicable.

#### Item 5. Interests of Named Experts and Counsel.

Not applicable.

#### Item 6. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional

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misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our certificate of incorporation provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or

she had no reasonable cause to believe his or her conduct was unlawful. Our certificate of incorporation provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors and officers. These indemnification agreements may require us, among other things, to indemnify our directors and officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of his or her service as one of our directors or officers, or any other company or enterprise to which the person provides services at our request.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

#### **Item 7. Exemption from Registration Claimed.**

Not applicable.

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#### **Item 8. Exhibits.**

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
4.1	Restated Certificate of Incorporation (currently in effect) (incorporated by reference to Exhibit 3.1 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-197193) filed on July 28, 2014).
4.2	Bylaws (currently in effect) (incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-197193) filed on July 2, 2014).
4.3	Restated Certificate of Incorporation (to be effective upon the closing of the Registrant's initial public offering) (incorporated by reference to Exhibit 3.3 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-197193) filed on July 28, 2014).
4.4	Amended and Restated Bylaws (to be effective upon the closing of the Registrant's initial public offering) (incorporated by reference to Exhibit 3.4 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-197193) filed on July 28, 2014).
4.5	Specimen Stock Certificate evidencing the shares of Common Stock (incorporated by reference to Exhibit 4.1 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-197193) filed on July 28, 2014).
5.1+	Opinion of Latham & Watkins LLP.
23.1+	Consent of Ernst & Young LLP.
23.2 +	Consent of Latham & Watkins LLP (contained in Exhibit 5.1).
24.1	Power of Attorney (included in signature page).
99.1	T2 Biosystems, Inc. Amended and Restated 2006 Employee, Director and Consultant Stock Plan, as amended (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-197193) filed on July 2, 2014).
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99.3	T2 Biosystems, Inc. 2014 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.20 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-197193) filed on July 28, 2014).

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+ Filed herewith

#### **Item 9. Undertakings.**

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

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(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the Registration Statement is on Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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## SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Lexington, Commonwealth of Massachusetts, on the 7<sup>th</sup> day of August, 2014.

**T2 BIOSYSTEMS, INC.**

By: /s/ John McDonough

John McDonough

President and Chief Executive Officer

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## SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of T2 Biosystems, Inc., hereby severally constitute and appoint John McDonough and Marc R. Jones, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JOHN MCDONOUGH</u> John P. McDonough	President, Chief Executive Officer and Director (principal executive officer)	August 7, 2014

<u>/s/ MARC R. JONES</u> Marc R. Jones	Chief Financial Officer (principal financial and accounting officer)	August 7, 2014
<u>/s/ JOSHUA BILENKER, M.D.</u> Joshua Bilenker, M.D.	Director	August 7, 2014
<u>/s/ THOMAS J. CARELLA</u> Thomas J. Carella	Director	August 7, 2014
<u>/s/ MICHAEL J. CIMA, PH.D.</u> Michael J. Cima, Ph.D.	Director	August 7, 2014
<u>/s/ ALAN L. CRANE</u> Alan L. Crane	Director	August 7, 2014
<u>/s/ JOHN W. CUMMING</u> John W. Cumming	Director	August 7, 2014
<u>/s/ DAVID B. ELSBREE</u> David B. Elsbree	Director	August 7, 2014
<u>/s/ STANLEY N. LAPIDUS</u> Stanley N. Lapidus	Director	August 7, 2014
<u>/s/ HARRY W. WILCOX</u> Harry W. Wilcox	Director	August 7, 2014

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+ Filed herewith

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LATHAM & WATKINS LLP

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Los Angeles	Tokyo
Madrid	Washington, D.C.

August 7, 2014

T2 Biosystems, Inc.  
 101 Hartwell Lane  
 Lexington, Massachusetts 02421

Re: Registration Statement on Form S-8; 5,778,601 shares of T2 Biosystems, Inc. Common Stock, \$0.001 par value per share

Ladies and Gentlemen:

We have acted as special counsel to T2 Biosystems, Inc., a Delaware corporation (the “**Company**”), in connection with the proposed issuance by the Company of up to 5,778,601 shares of common stock of the Company, \$0.001 par value per share (the “**Shares**”), issuable under the T2 Biosystems, Inc. Amended and Restated 2006 Employee, Director and Consultant Stock Plan, as amended (the “**2006 Plan**”), the T2 Biosystems, Inc. 2014 Incentive Award Plan (the “**2014 Plan**”) and the T2 Biosystems, Inc. 2014 Employee Stock Purchase Plan (the “**2014 ESPP**” and together with the 2006 Plan, the “**Plans**”). The Shares are included in a registration statement on Form S-8 under the Securities Act of 1933, as amended (the “**Act**”), filed with the Securities and Exchange Commission (the “**Commission**”) on August 7, 2014 (the “**Registration Statement**”). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware (the “**DGCL**”), and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and have been issued by

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the Company for legal consideration in excess of par value in the circumstances contemplated by the Plans, assuming in each case that the individual grants or awards under the Plans are duly authorized by all necessary corporate action and duly granted or awarded and exercised in accordance with the requirements of law and the Plans (and the agreements and awards duly adopted thereunder and in accordance therewith), the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the DGCL.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Amended and Restated 2006 Employee, Director and Consultant Stock Plan, 2014 Incentive Award Plan, and the 2014 Employee Stock Purchase Plan of T2 Biosystems, Inc. of our report dated April 24, 2014, except for Note 17(a) and (b), as to which the date is July 15, 2014, and Note 17(c), as to which the date is July 25, 2014, with respect to the financial statements of T2 Biosystems, Inc. included in its Registration Statement (Form S-1 No. 333-197193) and related prospectus, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts  
August 7, 2014

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