UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 4, 2015

T2 BIOSYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-36571 Commission

(Commission File Number) **20-4827488** (IRS Employer Identification Number)

101 Hartwell Avenue, Lexington, Massachusetts 02421 (Address of principal executive offices, including Zip Code)

(781) 761-4646

(Registrant's telephone number, including area code)

N/A

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) On August 4, 2015, Marc R. Jones notified T2 Biosystems, Inc. (the "Company") of his resignation as the Company's Chief Financial Officer effective August 5, 2015 immediately following the Company's filing with the Securities and Exchange Commission of its quarterly report on Form 10-Q for the quarter ending June 30, 2015 and as an employee effective August 10, 2015. In connection with his resignation, the Company anticipates entering into a separation agreement with Mr. Jones pursuant to which he will execute a general release of claims in the Company's favor and be entitled to receive (1) an amount equal to 6 months of his annual base salary (\$150,000 in the aggregate), payable over a 6-month period following his resignation, and (2) reimbursement for a portion of the COBRA premiums (based on the then-current cost-sharing rates for active employees) for continued medical coverage for 6 months following his resignation.

(c) Also on August 4, 2015, the Company's Board of Directors appointed Maurice L. Castonguay to serve as the Company's Chief Financial Officer, effective August 5, 2015 immediately following the Company's filing with the Securities and Exchange Commission of its quarterly report on Form 10-Q for the quarter ending June 30, 2015. Prior to joining the Company, Mr. Castonguay, 64, held various positions, including Chief Financial Officer, Principal Accounting Officer, and Senior Vice President, at Sonus Networks, Inc., from August 2011 through November 2013. Prior to joining Sonus Networks, Inc., Mr. Castonguay served as Chief Financial Officer of BigBand Networks, Inc., as well as various additional public and private companies during his career.

(e) In connection with his appointment, the Company entered into an offer letter agreement and change of control severance letter agreement with Mr. Castonguay. Under the terms of Mr. Castonguay's offer letter agreement, he will receive an initial annual base salary of \$300,000 and will be eligible to receive an annual cash bonus award targeted at 40% of his annual base salary (pro-rated for 2015), subject to the attainment of Company and individual performance goals. Effective as of August 6, 2015, the Board granted Mr. Castonguay an option under the Company's 2014 Incentive Award Plan to purchase 146,600 shares of common stock of the Company at an exercise price per share equal to the stock's closing price on the NASDAQ market on the grant date. The option vests as to 25% of the shares on the first anniversary of Mr. Castonguay's employment start date and as to the remaining shares in

equal monthly installments over the following 36 months, subject to Mr. Castonguay's continued service. Mr. Castonguay has also entered into a noncompete, non-disclosure and invention assignment agreement with us pursuant to which he has agreed to refrain from disclosing our confidential information indefinitely and from competing with us or soliciting our employees or consultants for 12 months following termination of his employment.

In addition, Mr. Castonguay and the Company entered into a change of control severance letter agreement. The agreement provides that, if Mr. Castonguay's employment is terminated by the Company without cause within 3 months preceding or 12 months following a change of control or by Mr. Castonguay for good reason within 12 months following a change of control (with the terms "cause," "change of control" and "good reason" as defined in the change of control severance letter agreement), Mr. Castonguay will be entitled, subject to his signing and not revoking a general release of claims in the Company's favor, to receive:

- an amount equal to his annual base salary, payable over a 12-month period following his termination,
- reimbursement for a portion of the COBRA premiums (based on the then-current cost-sharing rates for active employees) for continued medical coverage for up to 12 months following his termination,
- if the termination occurs prior to the first anniversary of his start date, accelerated vesting of the portion of his equity awards that would have otherwise vested over the 12 month period following the date of termination, and
- · if the termination occurs on or after the first anniversary of his start date, full accelerated vesting of all of his outstanding equity awards.

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Item 9.01 Financial Statements and Exhibits.

(d) Exhibits	
Exhibit No.	Description
99.1	Press Release dated August 4, 2015

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: August 7, 2015

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T2 BIOSYSTEMS, INC.

By: /s/ John McDonough John McDonough President and Chief Executive Officer

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FOR IMMEDIATE RELEASE

T2 BIOSYSTEMS NAMES NEW CHIEF FINANCIAL OFFICER

LEXINGTON, Mass. — **August 4, 2015** — T2 Biosystems (NASDAQ:TTOO), a company developing innovative diagnostic products to improve patient health, today announced the appointment of veteran finance and operations management executive Maurice Castonguay as the Company's chief financial officer (CFO), effective immediately.

"With more than 25 years of experience having served as a CFO of numerous public and private technology companies, Moe is a key addition to our executive team," said John McDonough, chief executive officer. "His impressive track record of growing and scaling complex, multi-million dollar technology businesses will be invaluable as we continue to gain share in the sepsis market with our T2Candida® Panel and T2Dx® Instrument and leverage our T2MR® platform to advance the product pipeline and emerge as a leader in the field of *in vitro* diagnostics."

Prior to joining the Company, Mr. Castonguay served as senior vice president and CFO of Sonus Networks, Inc. (Nasdaq: SONS). He has also held CFO positions at Bigband Networks, Inc. (Nasdaq), Acopia Networks, Inc., Broadbus Technologies, Inc., MatrixOne Inc. (Nasdaq) and Stratus Computer, Inc. (NYSE) among others.

Mr. Castonguay, a Certified Public Accountant, earned a B.S. in Accounting and an M.S. in Taxation from Bentley University and an M.B.A. degree from Babson College. He succeeds Marc Jones as CFO, who has served in that role since April 2013.

Mr. McDonough said, "Marc Jones has been an exceptional partner and an outstanding financial steward for T2 Biosystems and its shareholders through the preparation and execution of the Company's IPO as well as in developing the accompanying financial systems and organization. We sincerely wish Marc all the best in his future endeavors."

About T2 Biosystems

T2 Biosystems is focused on developing innovative diagnostic products to improve patient health. With two FDA-cleared products targeting sepsis and a range of additional products in development, T2 Biosystems is an emerging leader in the field of *in vitro* diagnostics. The Company is utilizing its proprietary T2 Magnetic Resonance platform, or T2MR, to develop a broad set of applications aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier. T2MR enables the fast and sensitive detection of pathogens, biomarkers and other abnormalities in a variety of unpurified patient sample types, including whole blood, eliminating the time-consuming sample prep required in current methods. For more information, please visit www.t2biosystems.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements. These forward-looking statements are based on management's current expectations. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the performance of the Company's diagnostic products and the ability to bring such products to market. These and other important factors discussed under the caption "Risk Factors" in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 4, 2015, could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management's estimates as of the date of this press release. While the Company may elect to update such forward-looking statements at some point in the future, it disclaims any obligation to do so, even if subsequent events cause its views to change. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this press release.

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