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): May 2, 2016

T2 BIOSYSTEMS, INC.

(Exact name of registrant as specified in its charter)

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

(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 2.02 Results of Operations and Financial Condition

On May 2, 2016, T2 Biosystems, Inc. (the "Company") issued a press release announcing its financial results for its fiscal quarter ended March 31, 2016 and held a conference call to discuss those results. A copy of the Company's press release and a copy of the transcript of the conference call are furnished with this report as Exhibits 99.1 and 99.2, respectively.

In accordance with General Instruction B.2 of Form 8-K, the information in this Item 2.02 and Exhibits 99.1 and 99.2 of this Current Report on Form 8-K are being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. Furthermore, such information, including Exhibits 99.1 and 99.2 attached hereto, shall not be deemed to be incorporated by reference in any filing under the Securities Act of 1933, as amended, except as expressly stated by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits	
Exhibit No.	Description
99.1	Press Release issued May 2, 2016
99.2	Transcript of conference call held by T2 Biosystems, Inc. on May 2, 2016

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: May 4, 2016

T2 BIOSYSTEMS, INC.

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

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EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release issued May 2, 2016
99.2	Transcript of conference call held by T2 Biosystems, Inc. on May 2, 2016
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FOR IMMEDIATE RELEASE

T2 Biosystems Reports 2016 First Quarter Results

LEXINGTON, Mass., **May 2, 2016** — T2 Biosystems, Inc. (NASDAQ: TTOO), a company developing innovative diagnostic products to improve patient health, today reported operating highlights and financial results for the first quarter ended March 31, 2016. Recent operational highlights included:

- During the first quarter, the Company received commitments for the adoption of the T2Candida[®] Panel and the T2Dx[®] Instrument with three new hospitals in the United States and two additional customer sites in Europe for a total of five new customer commitments.
- Included in the new accounts closed in the first quarter were a major regional reference lab that services many hospitals and a leading Department of Defense hospital that treats critically wounded patients.
- In the first quarter, the Company entered into agreements with three distribution partners in Spain, France, and Italy that will sell and support the T2Dx Instrument and T2Candida Panel in their respective countries.
- As of March 31, 2016, 35 customers, including multiple hospital systems, have committed to adopt the T2Dx Instrument at sites in the United States and Europe.
- In the first quarter, seven hospitals in the United States completed installation and verification and began using the T2Candida Panel to test patients.
- During the first quarter, the Company continued patient enrollment in its T2Bacteria[®] Panel clinical trial and remains on track with the goal of receiving FDA clearance in the first part of 2017.

"The T2Dx Instrument and T2Candida Panel technologies are disruptive — they're changing the way sepsis is battled in a growing number of leading hospitals, and market demand for our platform remains robust. Our sales pipeline continued to advance in the first quarter, and perhaps more importantly, seven new hospitals completed their installation and verification processes and began testing patients," said John McDonough, president and CEO. "As hospitals begin testing patients, success stories continue to be reported in which the T2Candida Panel is detecting positive patients several days faster than blood culture while also detecting patients completely missed by blood culture. We believe that these case studies along with the corresponding positive impact on hospital costs, will continue to drive greater adoption of the platform. At the same time, we continue to believe the introduction of the T2Bacteria Panel will be a game changer in the market, further accelerating overall adoption and supporting more rapid growth as we believe it will more than double our market opportunity and will make the economic and clinical models even more attractive to our hospital customers."

Financial Results

Total revenue in the first quarter of 2016 was approximately \$1.1 million, which consisted of \$437,000 of product revenue and \$659,000 of research revenue. Product revenue in the first quarter, which grew more than 27 percent from the fourth quarter of 2015, was primarily derived from the sale of consumable diagnostic tests. In comparison, the Company recorded total revenues of \$188,000 in the first quarter of 2015, of which only \$10,000 were from the sale of diagnostic tests.

Total operating expenses for the first quarter of 2016 were \$12.8 million compared to \$10.3 million for the first quarter of 2015. Operating expenses for the quarter increased over the previous year, as the Company continued to expand its sales force and increase research and development on new products that utilize the T2MR[®] technology.

The net loss applicable to common shareholders for the first quarter of 2016 was \$13.4 million, or \$0.55 loss per share, compared to \$10.6 million, or \$0.53 loss per share, for the first quarter of 2015. The increased loss was principally driven by the increased cost of product revenue and the growth in operating expenses noted above.

The Company's balance sheet as of March 31, 2016, showed total cash and cash equivalents of \$59.5 million. The Company has another \$10 million available through an equipment lease credit line.

2016 Outlook

The Company anticipates closing a total of 45-65 commitments globally during the year. In addition, the Company anticipates higher product revenue in the second quarter of 2016 than was realized in the first quarter of 2016, primarily as a result of additional hospitals going live and the increased use of the T2Candida Panel at institutions that are already testing patients. Research revenue is expected to be comparable to what was realized in the first quarter of 2016.

The Company anticipates total second quarter of 2016 operating expenses to be between \$12.8 million and \$13.2 million. The second quarter of 2016 expenses are expected to include approximately \$2.0 million in non-cash expenses, which are primarily depreciation and stock compensation expense.

The Company is forecasting weighted average shares for the second quarter of 2016 to be 24,400,000 and, for the full year, the Company is forecasting 24,700,000.

In addition to the \$59.5 million in cash and cash equivalents on the Company's balance sheet as of March 31, 2016, the Company has the ability to utilize the \$10 million equipment lease facility that the Company entered into in October 2015.

T2 Biosystems' management will discuss the Company's financial results for the first quarter ended March 31, 2016, and provide a general business update during a conference call beginning at 4:30 p.m. Eastern Time today, Monday, May 2, 2016. To join the call, participants may dial 1-877-407-4018 (U.S.) or 1-201-689-8471 (International). To listen to the live call via T2 Biosystems' website, go to www.t2biosystems.com, in the Events & Presentations page of the Investors section.

A webcast replay of the call will be available for 30 days following the conclusion of the call in the Events & Presentations page of the Investors section of the website.

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, including, without limitation, the statements above under the heading "2016 Outlook" 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 could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. For more information on risk factors for T2 Biosystems, Inc.'s business, please refer to the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission from time to time. 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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T2 Biosystems, Inc. Condensed Consolidated Statements of Operations and Comprehensive Loss (In thousands, except share and per share data) (Unaudited)

	Three Months Ended March 31,		
	 2016		2015
Revenue:			
Product revenue	\$ 437	\$	10
Research revenue	659		178
Total revenue	 1,096		188
Costs and expenses:			
Cost of product revenue	1,026		3
Research and development	6,589		5,868
Selling, general and administrative	6,204		4,468
Total costs and expenses	 13,819		10,339

Loss from operations	(12,723)		(10,151)
Interest expense, net	(735)		(477)
Other income, net	32		9
Net loss and comprehensive loss	\$ (13,426)	\$	(10,619)
Net loss per share — basic and diluted	\$ (0.55)	\$	(0.53)
Weighted-average number of common shares used in computing net loss per share—	 	_	
basic and diluted	 24,218,767		20,080,515

T2 Biosystems, Inc. Condensed Consolidated Balance Sheets (In thousands, except share and per share data) (Unaudited)

	March 31, 2016		December 31, 2015	
Assets				
Current assets:				
Cash and cash equivalents	\$	59,519	\$	73,662
Accounts receivable		360		369
Prepaid expenses and other current assets		894		838
Inventories		1,259		683
Total current assets		62,032		75,552
Property and equipment, net		12,287		10,655
Restricted cash, net of current portion		260		260
Other assets		358		358
Total assets	\$	74,937	\$	86,825
Liabilities and stockholders' equity				
Current liabilities:				
Accounts payable	\$	1,552	\$	1,228
Accrued expenses and other current liabilities		4,216		4,162
Current portion of notes payable		6,943		4,449
Deferred revenue		1,736		2,146
Current portion of lease incentives		276		268
Total current liabilities		14,723		12,253
Notes payable, net of current portion		23,572		26,121
Lease incentives, net of current portion		1,007		1,076
Other liabilities		546		436
Commitments and contingencies				
Stockholders' equity:				
Common stock, \$0.001 par value; 200,000,000 shares authorized at March 31, 2016 and December 31,				
2015; 24,283,115 and 24,175,381 shares issued and outstanding at March 31, 2016 and December 31,				
2015, respectively		24		24
Additional paid-in capital		197,376		195,800
Accumulated deficit		(162,311)		(148,885)
Total stockholders' equity		35,089		46,939
Total liabilities and stockholders' equity	\$	74,937	\$	86,825

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Matt Clawson:

Thank you, . Good afternoon, everyone. Thanks for joining us for T2 Biosystem's First quarter results conference call. On the call this afternoon to discuss results and operational milestones for the period ended Mrch 31st, 2016 are president and CEO, John McDonough, Chief Financial Officer, Moe Castonguay and David Harding our Chief Commercial Officer. John and Moe will lead off the call with some prepared remarks followed by a question-and-answer period.

I'd like to remind everyone that comments made by management and responses to questions today will include forward-looking statements. Those include statements related to T2 Biosystems' future financial and operating results and plans for developing and marketing new products. Forward-looking statements are based on estimates and assumptions as of today and are subject to risks and uncertainties that may cause actual results to differ materially from those expressed or implied by those statements, including the risks and uncertainties described in T2 Biosystems filings with the SEC, the Risk Factors section in its registration statements on Forms S-1 and 10K, as well as other risks and uncertainties detailed in subsequent SEC filings. The Company undertakes no obligation to publicly update or revise any forward-looking statements except as required by law.

With that, I'd like to turn the call over to CEO John McDonough for his opening comments. Good afternoon, John.

JOHN MCDONOUGH:

Thanks, Matt and good afternoon everyone. Thank you for joining us on the call today.

I'm sure most of you are aware that we pre-announced certain first quarter metrics on April 11, including hospital commitments and other commercial measures in the quarter. Since we had that call such a short time ago, I'm going to be brief today. I will reiterate the key accomplishments and lessons learned from the quarter, offer a new anecdote from a hospital I think demonstrates the value we deliver via our technology, have Moe go over the financial details, and then make some brief closing remarks before I open the call up to questions.

We closed three hospital accounts in the US during the quarter—less than we anticipated—and two in Europe, which was ahead of expectations. As we discussed, predicting the timing of hospital close rates over a short period of time in the early stages of product adoption is difficult, especially for a revolutionary value proposition like ours. What we are offering is helping to save lives and dollars everyday now, but we are changing the decades old, fundamental way hospitals defend against sepsis and when you are changing a paradigm for patient care, there can often be hitches in the final stages that create delays. That said — we have never felt more sure of our selling proposition as the evidence of our value proposition is now rolling in.

Most importantly and perhaps of most importance to you, however, is that we are tracking well and we believe the market demand for our platform remains robust. We completed a deep analysis of our sales pipeline and, in light of the slow Q1 start, we have taken the prudent step of adjusting our target to 45-65 hospital and lab commitments for the year which would bring our total customer base to 75 to 95 hospitals by year end. As we progress through the year and gain greater insight, we will update you on that target.

Europe has always been a key target for us, but it's been a pleasant surprise. We closed three distribution agreements with well-connected partners during the quarter—ahead of our goal of two—enabling us to close two customer placements in the first quarter. Again, that's ahead of our expectations that the first customer placements would be in the second half of the year. Our distribution partners in Europe are experienced in the microbiology space and skilled at identifying the best customers for our technology, so we believe we are well situated there.

We also believe that the introduction of T2Bacteria into the market, which we currently expect to occur early next year, will make a significant difference in driving adoption. The need for rapid detection of bacterial sepsis is similar to Candida sepsis, but, based on our experience, there appears to be a broader market appreciation for bacterial sepsis. We have a number of hospitals in the sales pipeline that have stated they are waiting for the bacteria panel to be added, despite the clear economic and clinical value generated by Candida alone.

We are currently making the necessary investments and build out of the sales team for optimal success today and to prepare for the co-marketing of both panels. Our target continues to be to have 20 people on board the sales team by the end of Q2 and add as we see the need through the end of 2016.

Before we touch on the financials, I'll share one brief anecdote: We received a very enthusiastic call recently from one of our hospital customers that recently went online with their system and started testing patients. Based on our T2Candida test, they picked up a patient who tested positive. Knowing with certainty what was going on with the patient, and after administering the appropriate antifungal drugs, they retested the patient four days later and the infection had cleared. Because of the ability to rapidly identify the cause of the infection, and to rapidly know the infection had cleared, the patient was sent home four days early. It's a simple example, and one that we understand may be replicated now in our growing family of institutions, but it demonstrates the kind of outcome our technology can produce. From the hospital and the patient's viewpoint—and of course from ours—this is wonderful news. And it's just a sample of the kind of very satisfying feedback we are receiving.

Now finally, I'd like to take a moment to briefly comment on the second piece of news this afternoon, which is the transition of the CFO role from Moe Castonguay to Shawn Lynch. As the press release indicated, Moe has decided to retire and Shawn will assume the CFO role after a brief transition period to help ensure a smooth handoff. Despite his relatively brief tenure, Moe made some significant contributions to the financial systems and operational health of the company. He has been a trusted partner and a helpful resource for the investment community. We wish Moe the best of luck as he contemplates the next, and hopefully more relaxing, phase of his life.

I am happy to report that we were able to attract an exceptional executive to take on the CFO role and to bring his own stamp to T2 Biosystems. Shawn has served in senior finance leadership roles in public companies for the past 13 years. He most recently served as Vice President and Chief Financial Officer of PerkinElmer's Environmental Health business, a provider of analytical instruments and consumables

to the food, environmental and pharmaceutical end markets. Prior to that, Shawn was with General Electric in various roles of increasing responsibility with his last assignment serving as Global Controller, Measurement & Control. Shawn started his career at KPMG LLP where he served in the firm's M&A and Audit practices. Shawn is a certified public accountant and received a BS in accounting from Suffolk University.

We believe his outstanding record of experience managing the finances within rapidly growing organizations as well as the discipline and systems acumen that comes from a long tenure within the General Electric organization will serve T2 well. He has a sterling reputation and I am certain that you will all enjoy working with Shawn when he officially takes the reins and begins to attend investor events and meetings next month.

And with that I'll turn the call over to Moe, who is here to do the call with us today, and I know you will all join me in wishing him all the best.

Moe?

MOE CASTONGUAY

Thanks, John

Total revenue for the first quarter was approximately \$1.1 million, which consisted of \$437,000 in product revenue primarily from consumable diagnostic tests and \$659,000 in research revenue.

Total operating expenses for the first quarter were \$12.8 million, reflecting increased investment in our sales force and commercialization of our products.

The net loss applicable to common shareholders for the first quarter was \$13.4 million, or \$0.55 loss per common share, compared to \$10.6 million, or \$0.53 loss per common share in the first quarter of 2015.

Our balance sheet as of March 31, 2016 remained strong reflecting total cash and cash equivalents of \$59.5 million with an additional \$10 million available under our equipment lease credit facility. Our first quarter cash burn was higher than a normal quarter due to payment of 2015 year end accruals.

Now for our 2016 Outlook

We expect 45-65 new customer commitments globally for the year.

Pricing on our T2Candida diagnostic tests is expected to remain stable in the range of \$200 and \$250.

In the first year since commencing shipment, approximately 90 percent of placements were under a reagent rental model. That number remains a good estimate of the pattern going forward.

Research revenue is expected to be comparable to what was realized in the first quarter of 2016.

We anticipate total second quarter operating expenses to be between \$12.8 million and \$13.2million, including approximately \$2.0 million in non-cash expenses that consist primarily of depreciation and stock compensation expenses.

Virtually all increases in operating expenses are associated with investments in building our sales and commercial activities, both in and outside the U.S., new product development, the clinical trials associated with new products, and building the infrastructure required to support the scale of business we expect to realize in 2017 and beyond.

We expect net interest expense to be approximately \$750,000 in the second quarter.

We anticipate that the number of common shares outstanding will be approximately 24.4 million in the second quarter and, for the full year, we are forecasting 24.7 million.

I'd like to say thank you to the many of you who I have had the good fortune to get to know over the past year. It has been a pleasure and great experience working with John and the entire team at T2Biosystems. I believe that I am leaving the company both in capable hands and better than when I arrived. With that I'll turn the call back over to John for some closing remarks. John?

JOHN MCDONOUGH

Thanks, Moe. I agree on both counts.

We remain very confident in our business and the momentum we are establishing. We believe we have made the necessary investments we need to make in building our sales team and commercial infrastructure to prepare for, and support, the growth we are expecting throughout this year and next. And we believe the introduction of our T2Bacteria product in early 2017 will help further drive adoption of our technology and drive future growth.

With each new time our T2MR technology goes online, we now receive different and wonderful feedback from the hospitals where it is operating. That kind of enthusiastic feedback is very gratifying for our entire team—to learn first-hand how our work is making a difference.

That real world experience is also translating to a growing body of data demonstrating that the value of our system — both financial and clinical — is real and demonstrable. We expect to see several presentations and posters at the ASM conference in June — where some of our first customers will be reporting on the impact we are having in their hospitals. We look forward to sharing some of these studies and findings with you in the coming months.

The business is tracking well and while we are still in the early stages of growing revenue, we are building a strong customer base with T2Candida and have a developing pipeline of products including T2Bacteria that we expect to drive further adoption of our platform in hospitals around the world, and utilization of our diagnostic tests that will drive revenue and ultimately long term profitability.

Finally, I will be attending the upcoming Deutsche Bank conference in early May and the Goldman Sachs Conference in June. I hope to see many of you at those events and others that will follow this summer.

With that, I'll turn the call over to the operator for questions. Operator?