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: September 14, 2017
(Date of earliest event reported)

T2 BIOSYSTEMS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-36571**	**20-4827488**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification Number)**

101 Hartwell Avenue, Lexington, Massachusetts 02421
(Address of principal executive offices and 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:

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

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

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

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

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Item 8.01 Other Events

Attached as Exhibit 99.1 hereto is a corporate presentation of T2 Biosystems, Inc. ("T2", "T2 Biosystems", "we", "us", "our" or the "Company) for use by the Company from time to time at conferences and during meetings with investors and other interested parties.

We are also filing the following information for the purpose of updating certain of our disclosures.

Business

Overview

The Lee Health System in Fort Myers, Florida compared patient and economic experience before and after T2Candida implementation. The data showed that in the post-T2Candida cohort, median length of stay for patients with *Candida* infections was reduced by seven days when detected by T2Candida while unnecessary antifungal therapy was avoided in 41% of patients tested and was discontinued after one dose in another 15% of patients tested.

Sepsis

Our Sepsis Solution

We believe our T2 Magnetic Resonance technology, or T2MR, delivers what no conventional technology currently available can: a rapid, sensitive and simple diagnostic platform to enable sepsis applications that can identify specific sepsis pathogens directly from an unpurified blood sample in hours instead of days at a level of accuracy equal to or better than blood culture-based diagnostics. The T2Sepsis Solution refers to the approach of combining the standard of care for the management of sepsis patients with our products, including the T2Dx Instrument, or the T2Dx, and T2Candida Panel, and the T2Bacteria Panel, which is commercially available in Europe and other countries that accept the CE mark and available for research use only in the United States. The T2Sepsis Solution is designed to enable clinicians to appropriately treat 95% of septic patients within the first twelve hours of developing the symptoms of disease. Currently, only 60% of patients are initially treated with effective empiric therapy. Of the remaining 40% of patients who are initially on ineffective empiric therapy, approximately 30% of the patients have a bacterial infection and 10% have Candida infections. Test panels included in the T2Sepsis Solution are designed to identify pathogens commonly resistant to empiric antimicrobial therapy, which we believe may enable physicians to effectively treat an additional 35% of septic patients beyond the 60% of patients receiving effective empiric therapy.

We believe the T2Sepsis Solution provides a pathway for more rapid and targeted treatment of infections, potentially reducing the mortality rate by as much as 75% if a patient is treated within 12 hours of suspicion of infection and significantly reducing the cost burden of sepsis. Each year, approximately 500,000 patients in the United States die from sepsis. According to a study published by *Critical Care Medicine* in 2006, in sepsis patients with documented hypotension, administration of effective antimicrobial therapy within the first hour of detection was associated with a survival rate of 79.9% and, over the ensuing six hours, each hour of delay in initiation of treatment was associated with an average decrease in survival of 7.6%. According to such study, the survival rate for septic patients who remained untreated for greater than 36 hours was approximately 5%. The toll of sepsis on a patient's health can be severe: more than one-in-five patients die within two years as a consequence of sepsis. Sepsis is also the most prevalent and costly cause of hospital readmissions.

We believe the T2Sepsis Solution addresses a significant unmet need in *in vitro* diagnostics by providing:

- **Limits of Detection as Low as 1 CFU/mL.** T2MR is the only technology currently available that can enable identification of sepsis pathogens directly from a patient's blood sample at limits of detection as low as 1 CFU/mL.

- **Rapid and Specific Results in as Few as Three Hours.** T2MR is the only technology that can enable species-specific results for pathogens associated with sepsis, directly from a patient's blood sample, without the need for blood culture, to deliver an actionable result in three hours.
- **Accurate Results Even in the Presence of Antimicrobial Therapy.** T2MR is the only technology that can reliably detect pathogens associated with sepsis, including slow-growing pathogens, such as *C. glabrata*, directly from a patient's blood sample, even in the presence of an antimicrobial therapy.
- **Easy-to-Use Platform.** T2MR eliminates the need for sample purification or extraction of target pathogens, enabling sample- to-result instruments that can be operated on-site by hospital staff, without the need for highly skilled technicians.

Our first U.S. Food and Drug Administration, or FDA-cleared products, the T2Dx and T2Candida, focus on the most lethal form of common blood stream infections that cause sepsis, *Candida*, which has an average mortality rate of approximately 40%. According to a 2005 report published in *Antimicrobial Agents and Chemotherapy*, this high mortality rate can be reduced to 11% with the initiation of targeted therapy within 12 hours of presentation of symptoms. Currently, a typical patient with a *Candida* infection averages 40 days in the hospital, including nine days in intensive care, resulting in an average cost per hospital stay of over $130,000 per patient. In a study published in the *American Journal of Respiratory and Critical Care Medicine* in 2009, providing targeted antifungal therapy within 24 hours of the presentation of symptoms decreased the length of hospital stay by approximately ten days and decreased the average cost of care by approximately $30,000 per patient. In addition, many hospitals initiate antifungal drugs, such as Caspofungin or Micafungin, while waiting for blood culture-based diagnostic results. We estimate this practice costs approximately $500 per patient and is currently in use for over 40% of high-risk patients on average and for all high-risk patients in some hospitals. A negative result from T2Candida can provide timely data allowing physicians to avoid unnecessary antifungal treatment and potentially reduce the treatment cost further.

We believe that by identifying the specific species of *Candida*, physicians can administer the most effective therapy, significantly improving patient outcomes and reducing hospital costs. We further believe that the adoption of the T2Dx and T2Candida can decrease both the high mortality rate and excessive costs of *Candida* infections because these products can enable clinicians to make earlier and more informed decisions by providing positive test results to direct therapy and negative test results to reduce the use of antifungal drugs.

T2Bacteria, a multiplex diagnostic panel that detects the major bacterial pathogens associated with sepsis that are frequently not covered by first-line antibiotics, is CE-Marked and available commercially in Europe, as well as available a research use only product in the United States. T2Bacteria runs on the T2Dx, and if cleared by the FDA for sale in the United States is expected to address the same approximately 6.75 million symptomatic high-risk patients as T2Candida while also expanding our reach to a new population of patients who are at increased risk for bacterial infections, including an additional two million people presenting with symptoms of infection in the emergency room setting. We believe that these factors make the United States market opportunity for T2Bacteria over $1.5 billion, and that T2Bacteria has the potential to achieve similar performance capabilities and provide similar benefits as T2Candida.

To the extent that our T2Bacteria panel is performed on an outpatient basis, third-party payors may separately reimburse our customers using existing CPT codes. By way of example, Medicare payment for outpatient clinical laboratory services is the lesser of the amount billed, the local fee for a geographic area, or the national limit established by the Centers for Medicare & Medicaid Services under the Clinical Laboratory Fee Schedule, or CLFS, on an annual basis. For 2017, the national limit for the series of CPT codes used to bill the T2Bacteria panel is approximately $290. Effective January 1, 2018, CLFS rates will be based on weighted median private payor rates as required by the Protecting Access to Medicare Act of 2014. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our diagnostic products or additional pricing pressures.

Clinical Utility

Customer Presentations

In 2016, four customers reported on their experiences with the T2Candida Panel. Below is a summary of those reports.

- Investigators at the Henry Ford Health System reported data that demonstrated that after the implementation of T2Candida in their hospital system, the hospital system projected that it may save an estimated $2.3 million annually, reduced median intensive care unit length of stay by seven days per patient (p=0.009), and reduced total length of stay by four days per patient (p=0.164). 75% of negative patients had antifungals discontinued or deescalated.

- Investigators at the Lee Health System reported that after the implementation of T2Candida, they have experienced a reduction in the median length of stay per patient by seven days, unnecessary antifungal therapy was avoided in 41% of patients, and unnecessary antifungal therapy was discontinued after one dose in another 15% of patients, and the average net antifungal savings was $195 for every patient tested with T2Candida.
- Investigators at Riverside Community Hospital reported that implementation of T2Candida led to therapy being discontinued for 100% of patients who tested negative, and for patients who tested positive and had not been on antifungals prior to testing, 83% of patients who tested positive received appropriate therapy within six hours of blood drawing and 100% within nine hours of blood draw.
- Investigators at Huntsville Hospital, showed that use of the T2Candida panel resulted in reduction in duration of therapy and time to de-escalation in negative patients. This yielded net pharmacy savings of approximately $280 per patient tested. T2Candida also detected 56% more positive patients than blood culture.
- Investigators at the University Di Roma reported that T2Candida detected invasive candidiasis that were not identified by blood culture in four cases. T2Candida identified three cases of *C. albicans* and one case of *C. glabrata* that were proven accurate with additional *in vitro* diagnostic testing and diagnostic imaging.

Candida Auris

In September 2017, we entered into an agreement with the Centers for Disease Control and Prevention (CDC), pursuant to which the CDC agreed to utilize T2Dx in its laboratory for testing and monitoring the emergence and outbreaks of the superbug *Candida auris*, which we expect to occur in hospitals around the United States.

Candida auris is a multi-drug resistant pathogen recognized by the CDC as a serious global health threat because it can be resistant to all three major classes of antifungal drugs and is difficult to identify. The CDC has also reported that more than one-in-three patients with *Candida auris* infections have died. Unlike most other species of *Candida*, *Candida auris* can spread quickly in a hospital making rapid identification and hospital environment surveillance a critical component of containing these outbreaks. Existing laboratory methods that detect *Candida auris*, including blood culture, suffer from prolonged detection times and low accuracy, which exacerbates the challenge in the fight to contain the superbug. Recently, reported cases have surged internationally, and the CDC has reported a significant increase in infected patients in the United States. According to the European Centre for Disease Prevention and Control, hospital outbreaks have occurred in the United Kingdom and Spain. Because *Candida auris* can be resistant to most treatment options and can spread so quickly, these hospital outbreaks have been difficult to contain by even the most enhanced control measures.

The goals of the CDC collaboration are to use the T2Dx Instrument to (i) validate the detection of *Candida auris* from patient skin samples and hospital environmental samples, (ii) validate a process for surveillance of *Candida auris* in healthcare facilities from skin and environmental samples, and (iii) assist state and local public health labs in combating the outbreak.

Preferred Pricing Arrangement with Cidara Therapeutics, Inc.

In September 2017, T2 and Cidara Therapeutics, Inc., or Cidara, announced a preferred pricing agreement for the commercial placement of T2Candida or, subject to FDA clearance, T2Bacteria, in U.S. hospitals or other sites involved in running Phase II, Phase II extension or Phase III clinical trials of Cidara's CD101 compound for the purpose of gaining FDA and EMA approval of such compound, or the Cidara Trials, that choose to participate in the program. The preferred pricing structure is exclusive to such sites and will run through the end of the Cidara Trials and submittal of the trial data to the FDA, unless earlier terminated by the parties pursuant to the terms and conditions of the agreement. Cidara will provide reimbursement coverage to sites for T2Candida tests that are used to screen patients for enrollment, provided that such costs are not covered by insurance, and subject to any terms and conditions separately

agreed between Cidara and the applicable trial site. In addition, Cidara trial sites will also have access to our test panels for *Candida auris* if we sell a research use only version of the panel or, in the event we were to obtain FDA clearance of any such panel, we will include such *Candida auris* test panel in the T2Dx Instruments subject to the preferred pricing agreement and will negotiate in good faith pricing terms.

Intellectual Property

We are the owner or licensee of over 60 patents and over 40 patent applications and possess substantial know-how and trade secrets which protect various aspects of our business and products. The patent families comprising our patent portfolio are primarily focused on protection of a range of general and specific attributes of our proprietary assay architecture and assay instrumentation for our T2Candida product and our T2Bacteria and T2Lyme product candidates, as well as protection of certain aspects of the conduct of the assays and detection of analytes. We also own several patent families covering various aspects of our T2HemoStat assay, including the assay architecture and conduct of the analysis. The issued patents in our patent families that cover T2Candida and T2Bacteria are expected to expire between 2023 and 2034, while additional pending applications covering T2Candida and T2Bacteria would be expected, if issued, to expire as late as 2037. The issued patents in our patent families that cover T2HemoStat are expected to expire between 2029 and 2032, while additional pending applications covering T2HemoStat, if issued, will be expected to expire as late as 2037. The issued patents in our patent families that cover T2Lyme are expected to expire between 2023 and 2034, while additional pending applications covering T2Lyme would be expected, if issued, to expire as late as 2037. In all cases, the expiration dates are subject to any extension that may be available under applicable law.

Risk Factors

Risks Related to Intellectual Property

If we are unable to protect our intellectual property effectively, our business would be harmed.

We rely on patent protection as well as trademark, copyright, trade secret protection and confidentiality agreements to protect the intellectual property rights related to our proprietary technologies. The strength of patents in our field involves complex legal and scientific questions. Uncertainty created by these questions means that our patents may provide only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We own or exclusively license over 35 issued U.S. patents and over 15 pending U.S. patent applications, including provisional and non-provisional filings. We also own or license over 50 pending or granted counterpart applications worldwide. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us and we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

We cannot assure you that any of our currently pending or future patent applications will result in issued patents with claims that cover our products and technologies in the United States or in other foreign countries, and we cannot predict how long it will take for such patents to be issued. Further, issuance of a patent is not conclusive as to its inventorship or scope, and there is no guarantee that our issued patents will include claims that are sufficiently broad to cover our technologies or to provide meaningful protection of our products from our competitors. Further, we cannot be certain that all relevant prior art relating to our patents and patent applications has been found. Accordingly, there may be prior art that can invalidate our issued patents or prevent a patent from issuing from a pending patent application, at all or with claims that have a scope broad enough to provide meaningful protection from our competitors.

Even if patents do successfully issue and even if such patents cover our products and technologies, we cannot assure you that other parties will not challenge the validity, enforceability or scope of such issued patents in the United States and in foreign countries, including by proceedings such as re-examination, inter-partes review, interference, opposition, or other patent office or court proceedings. Moreover, we cannot assure you that if such patents were challenged in court or before a regulatory agency that the patent claims will be held valid, enforceable, or be sufficiently broad to cover our technologies or to provide meaningful protection from our competitors. Nor can we assure you that the applicable court or agency will uphold our ownership rights in such patents. Accordingly, we cannot guarantee that we will be successful in defending challenges made against our patents and patent

applications. Any successful third-party challenge to our patents could result in the unenforceability or invalidity of such patents, or narrowing of claim scope, such that we could be deprived of patent protection necessary for the successful commercialization of our products and technologies, which could adversely affect our business.

Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property, provide exclusivity for our products and technologies or prevent others from designing around our claims. Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies. These products and technologies may not be covered by claims of issued patents owned by our company. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business. In addition, competitors could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of the protections provided by our intellectual property rights. If our intellectual property, including licensed intellectual property, does not adequately protect our market position against competitors' products and methods, our competitive position could be adversely affected, as could our business.

Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product or product candidate under patent protection could be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we were the first to make the inventions covered by our pending patent applications, or that we were the first to file any patent application related to a product or product candidate. Furthermore, if third parties have filed such patent applications, an interference proceeding in the United States can be initiated by a third party to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. In addition, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available; however the life of a patent, and the protection it affords, is limited.

Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the non-patented intellectual property related to our technologies to third parties, and there is no guarantee that we will have any such enforceable trade secret protection, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

We may be involved in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, enforceability and validity of others' proprietary rights, or to defend against third-party claims of intellectual property infringement, any of which could be time-intensive and costly and may adversely impact our business or stock price.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the medical device and diagnostics industries, including patent infringement lawsuits, interferences, oppositions and inter partes review proceedings before the U.S. Patent and Trademark Office, or U.S. PTO, and corresponding foreign patent offices. While we have not received notices of claims of infringement or misappropriation or misuse of other parties' proprietary rights in the past, we may from time to time receive such notices in the future. Some of these claims may lead to litigation. Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, methods of manufacture or methods of use of our products and technologies. Because patent applications can take many years to issue, third parties may have currently pending patent applications which may later result in issued patents that our products and technologies may infringe, or which such third parties claim are infringed by the use of our technologies. We cannot assure you that we will prevail in such actions, or that other actions alleging misappropriation or misuse by us of third-party trade secrets or infringement by us of third-party patents, trademarks or other rights, or challenging the validity of our patents, trademarks or other rights, will not be asserted against us.

Litigation may be necessary for us to enforce our patent and proprietary rights or to determine the scope, enforceability or validity of the proprietary rights of others. There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the medical diagnostics industry. Third parties may assert that we are employing their proprietary technology without authorization. Many of our competitors have significantly larger and more mature patent portfolios than we currently have. In addition, future litigation may involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may provide little or no deterrence or protection. Parties making claims against us for infringement of their intellectual property rights may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our products and technologies. Further, defense of such claims in litigation, regardless of merit, could result in substantial legal fees and could adversely affect the scope of our patent protection, and would be a substantial diversion of employee, management and technical personnel resources from our business. The outcome of any litigation or other proceeding is inherently uncertain and might not be favorable to us. In the event of a successful claim of infringement against us, we could be required to redesign our infringing products or obtain a license from such third party to continue developing and commercializing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms, or at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could therefore incur substantial costs for licenses obtained from third parties, if such licenses were available at all, which could negatively affect our gross margins, or prevent us from commercializing our products and technologies. Further, we could encounter delays in product introductions, or interruptions in product sales, as we develop alternative methods or products to avoid infringing third-party rights. In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, enforceability or scope of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. Any litigation that may be necessary in the future could result in substantial costs and the diversion of our resources and could have a material adverse effect on our business, operating results or financial condition. Further, if the scope of protection provided by our patents or patent applications is threatened or reduced as a result of litigation, it could discourage third parties from entering into collaborations with us that are important to the commercialization of our products.

We cannot guarantee that we have identified all relevant third-party intellectual property rights that may be infringed by our technology, nor is there any assurance that patents will not issue in the future from currently pending applications that may be infringed by our technology or products or product candidates. We are aware of third parties that have issued patents and pending patent applications in the United States, Europe, Canada, and other jurisdictions in the field of magnetic resonance devices and/or methods for analyte detection, including the preparation and use of reagents. While we continue to evaluate third-party patents in this area on an ongoing basis, we cannot guarantee that patents we currently are aware of will be found invalid or not infringed if we are accused of infringing them, or if our products are found to infringe, that we will be able to modify our products to cause them to be non-infringing on a timely or cost-effective basis, or at all. We currently monitor the intellectual property positions of some companies in this field that are potential competitors or are conducting research and development in areas that relate to our business, and will continue to do so as we progress the development and commercialization of our products or product candidates. While we continue to evaluate third-party patents in this area on an ongoing basis, we cannot assure you that third parties do not currently have or will not in the future have issued patents or other intellectual property rights that may be infringed by the practice of our technology or the commercialization of our products or product candidates.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or you perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

In addition, certain of our agreements with suppliers, distributors, customers and other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in infringement claims relating to our technologies or products, or rights licensed to them by us. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify any of these third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, or financial condition.

Executive Officers

The following table identifies our executive officers and sets forth their current position(s) at T2 Biosystems and their ages as of September 12, 2017.

Name	Age	Position
John McDonough	57	President, Chief Executive Officer and Director
Thomas J. Lowery, Ph.D.	39	Chief Scientific Officer
Darlene Deptula-Hicks	59	Senior Vice President and Chief Financial Officer
Rahul Dhanda	44	Senior Vice President, Corporate Development
Michael Gibbs, Esq.	46	Vice President and General Counsel
Joanne Spadoro	58	Chief Operations Officer

Biographical information for our executive officers, as of September 12, 2017, is set forth below.

John McDonough has served as our President and Chief Executive Officer and a member of our Board of Directors since November 2007. From 2003 to 2007, Mr. McDonough held various positions at Cytyc Corporation, a company engaged in the design, development, manufacturing and marketing of clinical products that focus on women's health, where he ultimately served as President of Cytyc Development Corporation. Mr. McDonough received his B.S.B.A. from Stonehill College. Mr. McDonough's extensive management experience as a senior executive and his diagnostic company experience contributed to our Board of Directors' conclusion that he should serve as a director of our company.

Thomas J. Lowery, Ph.D. has served as our Chief Scientific Officer since September 2013. Since joining our company in 2007, Dr. Lowery has held various technical leadership roles in the assay, methods, reagents and detector development programs. Prior to joining our company, Dr. Lowery conducted research at the University of California Berkeley focused on developing innovative magnetic resonance based biosensors for molecular imaging. Dr. Lowery received his Ph.D. in chemistry from the University of California, Berkeley and his B.S. in biochemistry from Brigham Young University.

Darlene Deptula-Hicks has served as our Senior Vice President and Chief Financial Officer since May 1, 2017. Prior to joining the company, Ms. Deptula-Hicks was the Senior Vice President & Chief Financial Officer for Pieris Pharmaceuticals, Inc. (NASDAQ:PIRS), a clinical stage biotechnology company developing therapeutics to treat challenging immunology-related diseases, from September 2015 to February 2017 and as Acting Chief Financial Officer from November 2014 to September 2015. From October 2014 to September 2015, Ms. Deptula-Hicks was also the Acting Chief Financial Officer for Claritas Genomics Inc., a clinical pediatric genetic testing company. From June 2012 to October 2014, Ms. Deptula-Hicks was Executive Vice President and Chief Financial Officer for Microline Surgical, Inc., a global surgical instruments and medical device company. From 2006 to 2011, Ms. Deptula-Hicks was Executive Vice President and Chief Financial Officer at ICAD, Inc. (NASDAQ:ICAD), a medical device company providing solutions for the early identification, treatment and monitoring of some of the most prevalent cancers. Ms. Deptula-Hicks completed an executive education program at Dartmouth College's Tuck School of Business, received her MBA from Rivier College, her B.S. in accounting from Southern New Hampshire University, and she also serves or has served on a number of public and private company boards.

Rahul Dhanda has served as our SVP of Corporate Development since February 2016. Since joining our company in 2008, Mr. Dhanda has held several leadership roles, including Vice President of Marketing since 2010. From June 2005 until he joined our company, Mr. Dhanda worked in marketing at Boston Scientific's Urology division, where he led the team responsible for the Access, Visualization and Laser Lithotripsy franchises. From May 2001 to June 2004, Mr. Dhanda worked in business development at Interleukin Genetics. Mr. Dhanda is a former committee member of the AAAS Committee on Scientific Freedom and Responsibility. Mr. Dhanda received his M.B.A. from MIT's Sloan School of Management and his B.A. in History from Wesleyan University.

Michael Gibbs, Esq. has served as our Vice President and General Counsel since January 2016. Mr. Gibbs joined our company in December 2014 as Senior Corporate Counsel. From 2011 until he joined our company, Mr. Gibbs was General Counsel for Keystone Dental, Inc., a medical device company. From 2003 to 2011, Mr. Gibbs was a corporate attorney with the law firm Bingham McCutchen LLP (now Morgan Lewis & Bockius). Prior to joining Bingham McCutchen LLP, he was an officer in the United States Marine Corps, departing with the rank of Major. Mr. Gibbs received his J.D. from Boston College Law School and his B.S. in Political Science from Syracuse University.

Joanne Spadoro, Ph.D. has served as our Chief Operations Officer since September 2016. From 2010 until she joined our company, Dr. Spadoro held various executive positions at Immucor, including Chief Scientific Officer and Vice President of Worldwide Operations. Dr. Spadoro was at Roche Molecular Systems from 1990 to 2009 where she held various executive positions, including Senior Vice President heading global development and operations functions. Dr. Spadoro received her Ph.D. in cell biology from the University of Connecticut and her B.A. in biological sciences from Douglass College.

On June 1, 2017, Michael Pfaller, resigned from his position as Chief Medical Officer of the company. Mr. Pfaller indicated that he resigned for personal reasons and his resignation was not the result of any disagreement with the management of the Company or the Board of Directors of the Company. Mr. Pfaller continues to provide services to the company as a member of the Company's Clinical Advisory Board.

Forward-Looking Statements

This report contains forward-looking statements. Such statements reflect the current views of our senior management, and include those about our goals, strategies, plans, objectives, prospects, milestones, future operations, business or industry, anticipated product benefits, market or collaboration opportunities, FDA or other regulatory approvals or clearances, estimated patient costs, patent expirations or issuances, risks and benefits, future events and conditions and potential scenarios. Such statements and those that include the words "expect," "intend," "plan," "believe," "project," "forecast," "estimate," "may," "should," "anticipate" and similar statements of a future or forward-looking nature identify forward-looking statements for purposes of the federal securities laws or otherwise. Forward-looking statements address matters that involve risks and uncertainties. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement, including, for example: (i) our status as an early commercial-stage company and expectation to incur losses in the future; (ii) our ability to obtain marketing authorization from the FDA or regulatory clearance for additional product candidates in the United States or abroad; (iii) the market acceptance of our technology; (iv) our ability to timely and successfully develop and commercialize existing and future product candidates; (v) our lengthy and variable sales cycle and lack of sales history; (vi) our ability to successfully manage growth; (vii) federal, state and foreign regulatory requirements; (viii) our uncertain future capital needs and ability to raise future capital; (ix) dependence on third parties; (x) recruiting, training and retaining key personnel; (xi) competitive factors; (xii) manufacturing and other product risks; (xii) risks related to intellectual property, governmental regulation and diagnostic product reimbursement, including those described in this report; and (xiii) other risk factors included in our annual report on form 10-K filed with the Securities and Exchange Commission (SEC) on March 15, 2017 and other documents we file with the SEC from time to time. Accordingly, there are or will be important factors that could cause our actual results to differ materially from those indicated in these statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. Although we believe that we have a reasonable basis for each forward-looking statement contained in this report, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

Exhibit No.	Description
99.1	Corporate Presentation of T2 Biosystems, Inc.

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: September 14, 2017

T2 BIOSYSTEMS, INC.

By: /s/ Darlene Deptula-Hicks
Darlene Deptula-Hicks
SVP and Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Corporate Presentation of T2 Biosystems, Inc.

T2 Biosystems®

Transforming Diagnostics, Patient Care & Economics

September 2017
(NASDAQ: TTOO)

Forward-Looking Statements

This presentation contains forward-looking statements. Such statements reflect the current views of senior management of T2 Biosystems, Inc. ("we", "us", "our", "T2", "T2 Biosystems" or the "Company") and include those about T2's goals, strategies, plans, objectives, prospects, milestones, future operations, business and industry, anticipated product benefits, future events and conditions and potential scenarios. Such statements and those that include the words “expect,” “intend,” “plan,” “believe,” “project,” “forecast,” “estimate,” “may,” “should,” “anticipate” and similar statements of a future or forward-looking nature identify forward-looking statements for purposes of the federal securities laws or otherwise. Forward-looking statements address matters that involve risks and uncertainties. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement, including, for example: (i) our status as an early commercial-stage company and expectation to incur losses in the future; (ii) our ability to obtain marketing authorization from the FDA or regulatory clearance for additional product candidates in the United States or abroad; (iii) the market acceptance of our technology; (iv) our ability to timely and successfully develop and commercialize existing and future product candidates; (v) our lengthy and variable sales cycle and lack of sales history; (vi) our ability to successfully manage growth; (vii) federal, state and foreign regulatory requirements; (viii) our uncertain future capital needs and ability to raise future capital; (ix) dependence on third parties; (x) recruiting, training and retaining key personnel; (xi) competitive factors; (xii) manufacturing and other product risks; (xii) risks related to intellectual property; and (xiii) other risk factors included in our annual report on form 10-K filed with the Securities and Exchange Commission (SEC) on March 15, 2017 and other documents we file with the SEC from time to time. Accordingly, there are or will be important factors that could cause our actual results to differ materially from those indicated in these statements. The statements made herein speak only as of the date of this presentation. We do not undertake, and specifically disclaim, any obligation to update any forward-looking statements contained in this presentation.

Transforming Diagnostics, Patient Care & Economics

A platform technology with multiple, billion-dollar franchise opportunities

T2MR

Innovative technology with broad applications

Market

$3B+ Initial market potential

T2Sepsis Solution

Provide species-specific results, direct from whole blood, in 3 to 5 hours[1]

Reimbursement

Products covered by existing reimbursement codes

Robust Pipeline

A new generation of diagnostics

Execution

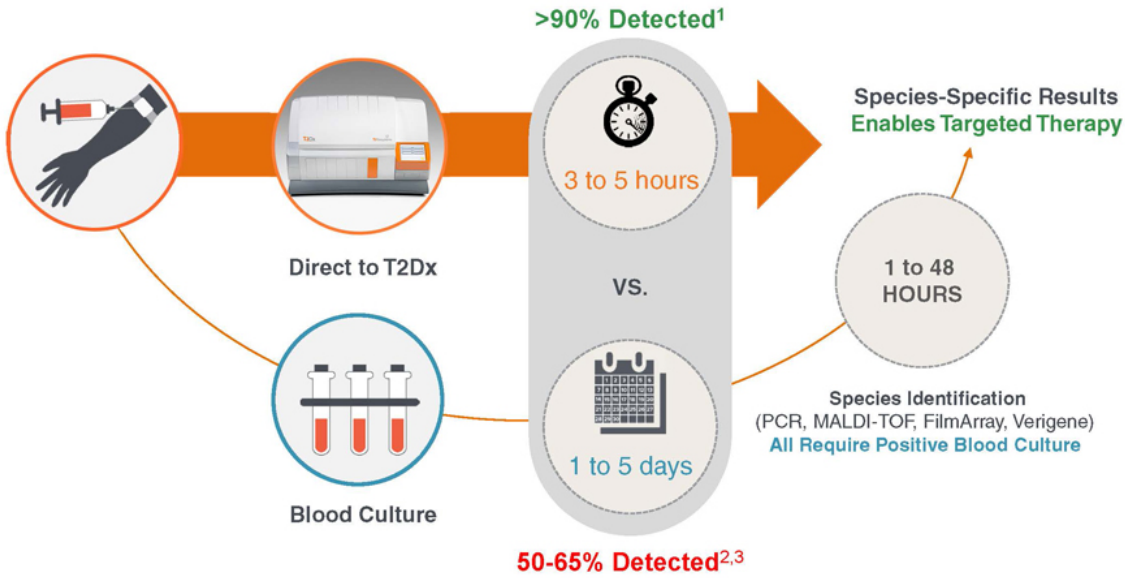
High-risk patient access growing and several collaborations established

1. Mylonakis, E., Clancy, C. J., Ostrosky-Zeichner, L., Garey, K. W., Alangaden, G. J., Vazquez, J. A., ... & Zervou, F. N. (2015). T2 magnetic resonance assay for the rapid diagnosis of candidemia in whole blood: a clinical trial. *Clinical Infectious Diseases*, ciu959.

T2MR: Establishing a New Standard in Sepsis Pathogen Detection

T2Biosystems®

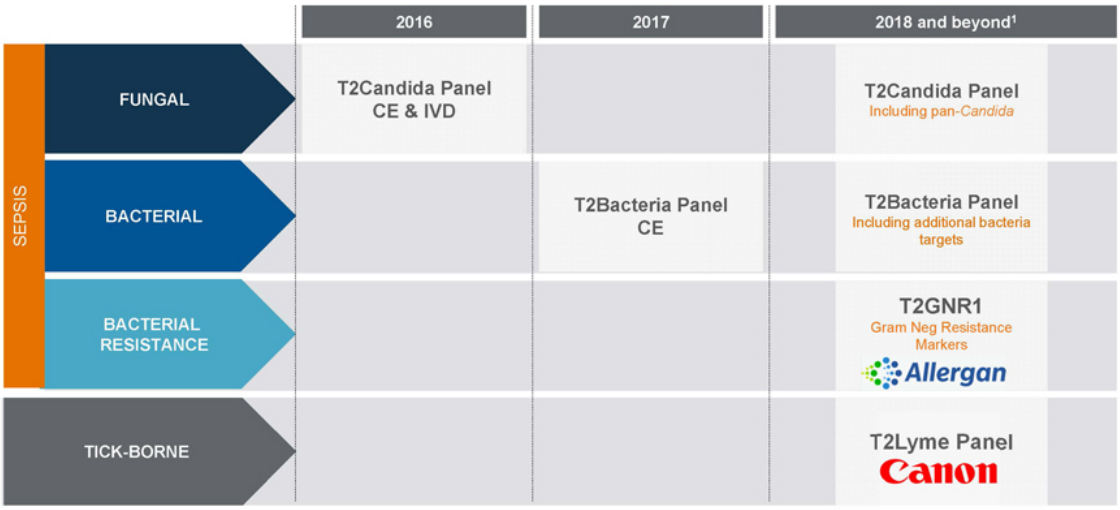
T2Sepsis diagnostics provide a faster and more accurate solution for sepsis pathogen detection



1. Mylonakis, E., Clancy, C. J., Ostrosky-Zeichner, L., Garey, K. W., Alangaden, G. J., Vazquez, J. A., ... & Zervou, F. N. (2015). T2 magnetic resonance assay for the rapid diagnosis of candidemia in whole blood: a clinical trial. *Clinical Infectious Diseases*, ciu959.
2. Clancy, C. J., & Nguyen, M. H. (2013). Finding the "missing 50%" of invasive candidiasis: how nonculture diagnostics will improve understanding of disease spectrum and transform patient care. Clinical infectious diseases, 56(9), 1284-1292.
3. Cockerill III, F. R., Wilson, J. W., Vetter, E. A., Goodman, K. M., Torgerson, C. A., Harmsen, W. S., ... & Wilson, W. R. (2004). Optimal testing parameters for blood cultures. Clinical Infectious Diseases, 38(12), 1724-1730.

Product Pipeline Highlights – Enabled by Highly-Sensitive Detection

Directly from whole blood – no requirement for blood culture



1. This slide contains T2's future goals and aspirations, which constitute forward-looking statement that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.

T2MR Featured at Tradeshows and in Over 200 Publications Worldwide

T2Biosystems®

T2Candida –
91.1% Sensitivity
99.4% Specificity
LoD 1-3 CFU/mL

Clinical Infectious Diseases

T2Candida –
96.4% Sensitivity
99.4% Specificity

T2Candida featured as sensitive and specific diagnostic test for invasive candidiasis

The NEW ENGLAND JOURNAL of MEDICINE

T2Candida projected to reduce deaths 60% and to save each site $5.8M/yr

T2MR detected Lyme Disease-causing bacteria in blood

T2Candida – Customers present cost savings and superiority to blood culture

asm microbe 2016

IDWeek 2016

T2Candida – Customers present cost savings, LOS savings, and decreased time to appropriate antifungal therapy

27th ECCMID

T2Candida – Customers present antifungal savings, improved care, and preliminary study on predicting patient outcomes. T2Bacteria - Early experience with performance evaluations in Europe.

asm microbe 2017

T2Sepsis Solution – Customers present stewardship benefits of T2Candida and early experience with T2Bacteria RUO

Shortcomings of Sepsis Management

The Facts About Sepsis

T2Biosystems®

Most expensive hospital-treated condition in the U.S.

Contributes to 1 in 2-3 hospital deaths[1]

Representing $27B in U.S. healthcare costs[2,3]

Claims more lives annually than breast cancer, prostate cancer and AIDS, combined[4]

More than 1 in 5 surviving patients die within 2 years as a consequence of sepsis[5]

More than 1.6M diagnosed annually in the U.S. and ~500,000 die[6]

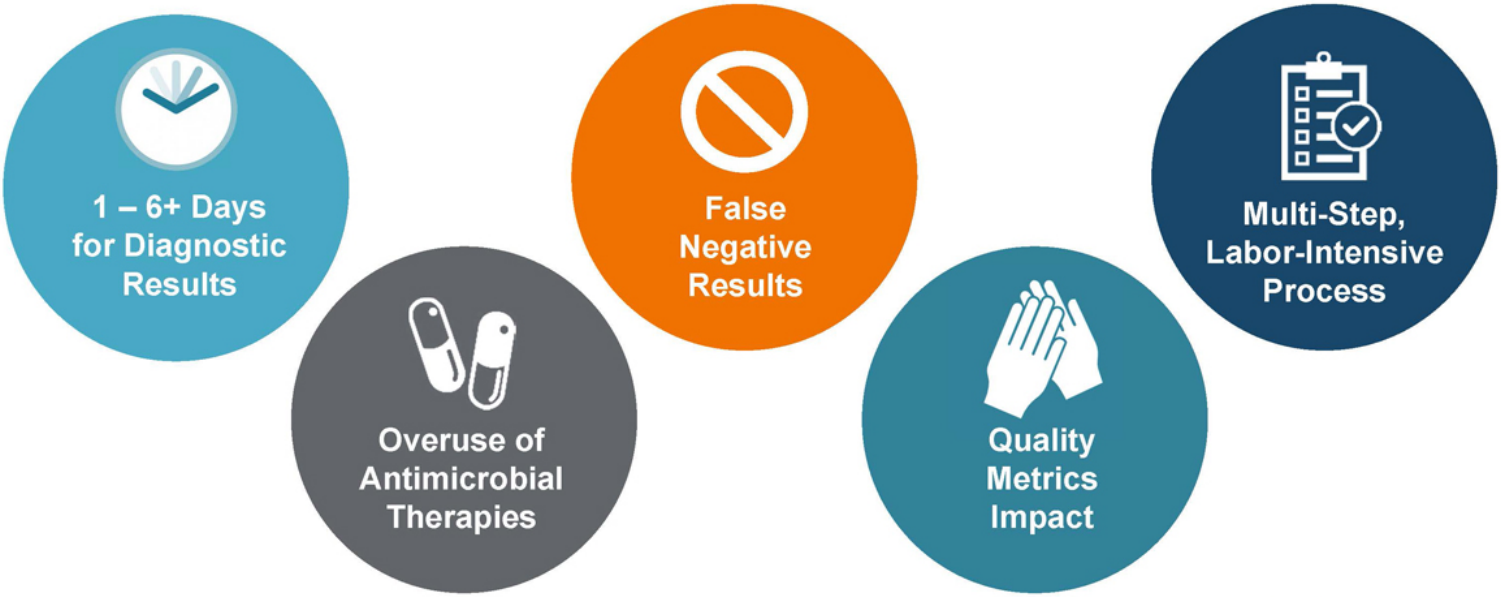
Sepsis is the most prevalent and costly cause of hospital readmissions[7]

1. Liu, V., Escobar, G. J., Greene, J. D., Soule, J., Whippy, A., Angus, D. C., & Iwashyna, T. J. (2014). Hospital deaths in patients with sepsis from 2 independent cohorts. Jama, 312(1), 90-92.
2. Torio, C. M., Moore, B. J. (2016). Statistical Brief# 204. Healthcare Cost and Utilization Project (HCUP). May.
3. McDermott, K. W., Elixhauser, A., Sun, R. (2017). Statistical Brief# 225. Healthcare Cost and Utilization Project (HCUP). June.
4. National Institute of General Medical Sciences. National Institutes of Health. Sepsis fact sheet. 2014.
5. Prescott, H. C., Osterholzer, J. J., Langa, K. M., Angus, D. C., & Iwashyna, T. J. (2016). Late mortality after sepsis: propensity matched cohort study. BMJ, 353, i2375.
6. Elixhauser, A., Friedman, B., Stranges, E. (2011). Statistical Brief# 122. Healthcare Cost and Utilization Project (HCUP). October.
7. Mayr, F. B., Talisa, V. B., Balakumar, V., Chang, C. C. H., Fine, M., & Yende, S. (2017). Proportion and cost of unplanned 30-day readmissions after sepsis compared with other medical conditions. Jama, 317(5), 530-531.

Shortcomings of Current Sepsis Management

T2Biosystems®

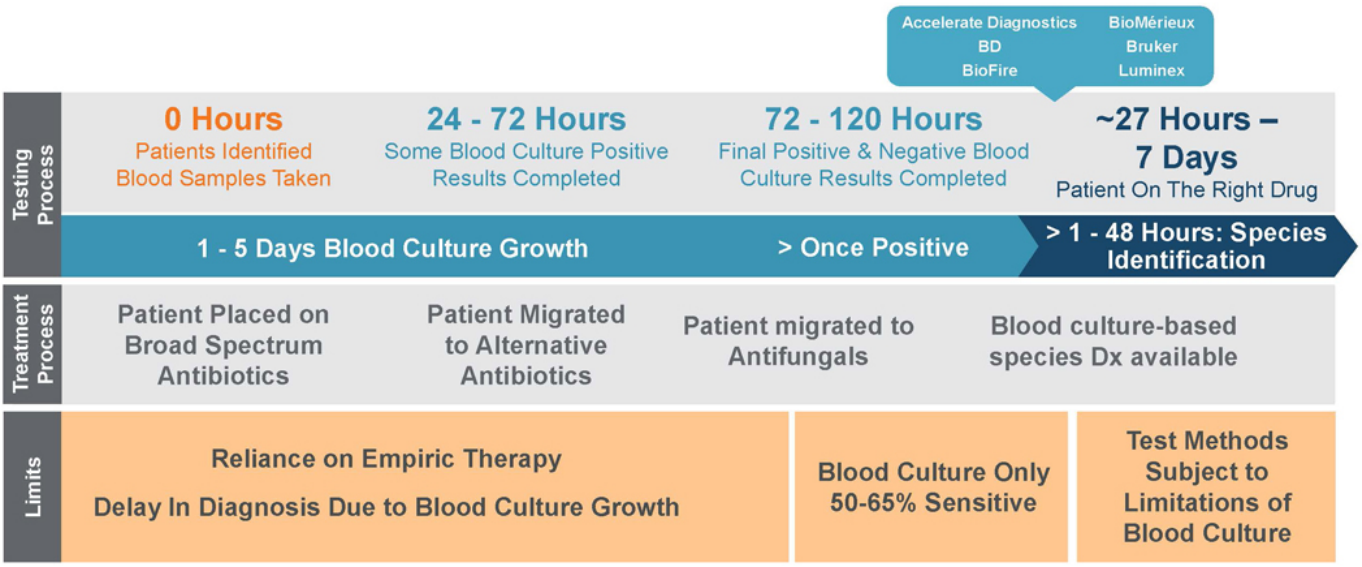
The current process drives up healthcare costs and delays in appropriate treatment



Sepsis Management Today

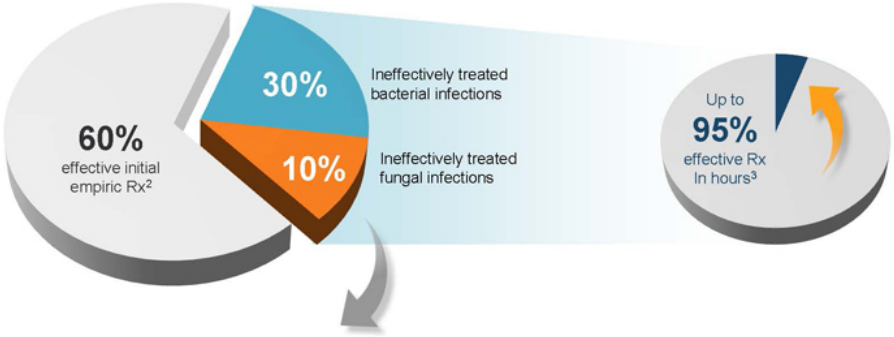
T2Biosystems

Empiric therapy dominates treatment decisions because of the time delay of blood culture



T2Sepsis Solution

T2Sepsis Solution[1]: Rapidly Detecting Species Not Covered by First Line Empiric Therapy



T2Candida Panel	% Mortality[4]
C. albicans	30%
C. tropicalis	41%
C. parapsilosis	23%
C. glabrata	31%
C. krusei	40%

T2Bacteria Panel	% Mortality
S. aureus	25%[5]
E. faecium	36%[6]
K. pneumoniae	42%[7]
P. aeruginosa	39%[5]
A. baumannii	50%[8]
E. Coli	22%[5]

Combined with first line empiric therapy, T2MR may enable clinicians to appropriately treat up to 95% of septic patients in hours

1. The T2Sepsis Solution™ combines the preferred standard of care for the management of sepsis patients with T2 Biosystems' products, including the T2Dx® Instrument and T2Candida® Panel, and the T2Bacteria® Panel, which is commercially available in Europe and other countries that accept the CE mark and available for research use only in the US.
2. Buehler, S. S., Madison, B., Snyder, S. R., Derzon, J. H., Cornish, N. E., Saubolle, M. A., ... & Wolk, D. M. (2016). Effectiveness of practices to increase timeliness of providing targeted therapy for inpatients with bloodstream infections: a laboratory medicine best practices systematic review and meta-analysis. Clinical microbiology reviews, 29(1), 59-103.
3. Kumar, A., Ellis, P., Arabi, Y., Roberts, D., Light, B., Parrillo, J. E., ... & Peters, C. (2009). Initiation of inappropriate antimicrobial therapy results in a fivefold reduction of survival in human septic shock. CHEST Journal, 136(5), 1237-1248.
4. Andes, D. R., Safdar, N., Baddley, J. W., Playford, G., Reboli, A. C., Rex, J. H., ... & Kullberg, B. J. (2012). Impact of treatment strategy on outcomes in patients with candidemia and other forms of invasive candidiasis: a patient-level quantitative review of randomized trials. Clinical Infectious Diseases, 54(8), 1110-1122.
5. Wisplinghoff, Hilmar, et al. "Nosocomial bloodstream infections in US hospitals: analysis of 24,179 cases from a prospective nationwide surveillance study." Clinical infectious diseases 39.3 (2004): 309-317.
6. Suppli, M., Aabenhus, R., Harboe, Z. B., Andersen, L. P., Tvede, M., & Jensen, J. U. (2011). Mortality in enterococcal bloodstream infections increases with inappropriate antimicrobial therapy. *Clinical Microbiology and Infection*, 17(7), 1078-1083.
7. Tumbarello, M., Viale, P., Viscoli, C., Trecarichi, E. M., Tumietto, F., Marchese, A., ... & Losito, A. R. (2012). Predictors of mortality in bloodstream infections caused by Klebsiella pneumoniae carbapenemase-producing K. pneumoniae: importance of combination therapy. Clinical Infectious Diseases, 55(7), 943-950.
8. Ayan, M., & Hosoglue, M. (2010). Acinetobacter baumannii: an emerging and important pathogen. Journal of clinical outcomes management: JCOM, 17(8), 363.

T2Bacteria is for investigational use only. Product is not FDA-cleared for clinical use.

Faster Therapy Saves Lives and Healthcare Costs[1]

T2Biosystems®

Current Situation

Septic Deaths

9,615 people die a week

Healthcare costs

$ $ $ $ $ $ $ $ $ $

$519,230,769 each week of care

Potential: If all high-risk patients are tested with the T2Sepsis Solution…

1,666 lives saved a week

Lives Saved

Healthcare savings

$ $ $ $

$ 253,211,538 weekly hospital savings

1. Represents the potential healthcare savings and lives saved using the T2Sepsis Solution to test high risk patients based on assumed levels of total annual patients assuming all high-risk sepsis patients are tested with T2Sepsis and assuming (i) ultimate regulatory approval for T2Bacteria, (ii) 95% of high risk patients receive appropriate therapy within hours of the presentation of symptoms, (iii) a 50% mortality rate reduction for patients who receive rapid appropriate therapy, and (iv) that each new detected patient saves $22,800. This slide contains T2's estimates, which are not based on historical results and constitute forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.

T2Bacteria Panel

Designed to rapidly identify six of the most deadly and prevalent bacteria species often not covered by initial empiric therapy

$1.5B+ Market Opportunity

FDA Filing, September 2017

CE Mark, July 2017

Completed pivotal study in 11 hospitals sites testing 1,700+ patient samples

Sensitivity: 95.8%
Specificity: 98.1%

63 samples T2+/BC- where additional culture was positive for organism identified by T2Bacteria

Established DRG and CPT reimbursement codes

CPT codes enable reimbursement of ~$290 for patients not admitted

Recently established Research Use Only (RUO) program in place with 5 customers under contract

Existing commercial organization will launch into existing T2Candida customer base, if cleared by FDA[1]

1. Represents T2's future goals and aspirations, which constitute forward-looking statement that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.

T2Bacteria Addresses Large Unmet Market Need

T2Biosystems®

No FDA-cleared technology that can derive species-specific results directly from blood

Bacteria: The Facts

~15,000,000
U.S. patients tested for blood stream infections annually[1]

8.75M
Patients at high risk for a bacterial infection[1]

Each hour of delayed treatment increases mortality risk nearly 8%[2]

60%
Patients have effective initial empiric therapy[3]

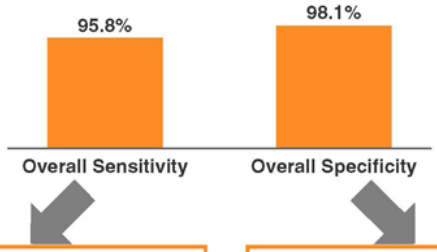
50-60%
Sepsis episodes are diagnosed in the ED[4]

~50%
Reduction in mortality with rapid detection and appropriate treatment[5]

T2Bacteria designed to detect **~70%** of community-acquired infections in the ED[6]

1. Market Research conducted by T2.
2. Kumar, A., et al. (2006). Duration of hypotension before initiation of effective antimicrobial therapy is the critical determinant of survival in human septic shock. Critical care medicine, 34(6), 1589-1596.
3. Buehler, S. S., et al., (2016). Effectiveness of practices to increase timeliness of providing targeted therapy for inpatients with bloodstream infections: a laboratory medicine best practices systematic review and meta-analysis. Clinical microbiology reviews, 29(1), 59-103.
4. Garnacho-Montero, J., et al (2015). Adequate antibiotic therapy prior to ICU admission in patients with severe sepsis and septic shock reduces hospital mortality. *Critical care*, *19*(1), 302.
5. Leibovici, L., Shraga, I., Drucker, M., Konigsberger, H., Samra, Z., & Pitlik, S. D. (1998). The benefit of appropriate empirical antibiotic treatment in patients with bloodstream infection. *Journal of internal medicine*, *244*(5), 379-386.
6. Luzzaro, F., et al. 2002). Prevalence and drug susceptibility of pathogens causing bloodstream infections in northern Italy: a two-year study in 16 hospitals. *European journal of clinical microbiology and infectious diseases*, *21*(12), 849-855.

T2Bacteria Clinical Trial Overview[1]



Sensitivity by Test

		95% Confidence Interval
A. baumannii	97.5% (39/40)	87.1% - 99.6%
E. coli	90.9% (30/33)	76.4% - 96.9%
E. faecium	100.0% (41/41)	91.4% - 100.0%
K. pneumoniae	100.0% (46/46)	92.3% - 100.0%
P. aeruginosa	97.7% (43/44)	88.2% - 99.6%
S. aureus	89.1% (49/55)	78.2% - 94.9%
Total	95.8% (248/259)	92.6% - 97.6%

Specificity by Test

		95% Confidence Interval
A. baumannii	99.2% (1713/1727)	98.6% - 99.5%
E. coli	95.4% (1637/1716)	94.3% - 96.3%
E. faecium	99.5% (1717/1726)	99.0% - 99.7%
K. pneumoniae	98.6% (1697/1721)	97.9% - 99.1%
P. aeruginosa	97.7% (1682/1722)	96.9% - 98.3%
S. aureus	98.4% (1683/1711)	97.6% - 98.9%
Total	98.1% (10,129/10,323)	97.8% - 98.4%

1. T2Bacteria Pivotal Clinical Study

T2Bacteria Detection of Known Positive Infections[1]

- Of the 102 known positive infections in the clinical pivotal trial, T2Bacteria detected 98 while the paired blood culture only detected 39

	T2+	Blood Culture+	Total
Paired T2/BC	35	39	39
T2+/BC- with additional positive culture[2]	63	0	63
Total known positive infections	98	39	102

1. T2Bacteria Pivotal Clinical Study
2. In the prospective arm of the study, results that were identified as positive by the T2Bacteria Panel but negative by blood culture were evaluated by looking at additional blood culture results obtained +/- 14 days of the paired T2 / blood culture draw.

Estimated Economic Benefit of the T2Bacteria Panel

T2Biosystems®

T2Bacteria Estimated Length of Stay & Cost Reductions with Appropriate Rx in 1st 24 hours if FDA-cleared[1]

Bacterial Species	Potential Length of Stay Reduction (in Days)		Potential Length of Stay Savings
	Hospital	ICU	
E. coli [2]	4	4	$22,800
P. aeruginosa [3]	6	7	$38,400
A. baumannii [4]	1	7	$39,100
K. pneumoniae [5]	4	4	$22,800
S. aureus [6]	3	5	$25,400
E. faecium [7]	7	3	$23,400
Cost per Day [8]	**$1,560**	**$4,150**	

- Studies show proper treatment of bacterial bloodstream infections within first 24 hrs can yield significant cost savings
  - Rapid detection and identification of pathogens critical to optimizing therapy
  - T2Bacteria Panel designed to combine speed and sensitivity, enabling targeted therapy within hours of patient presentation

1. Estimated economic and clinical impact based on the following studies for specified bacterial species, assuming ultimate regulatory approval, not actual historical results. This slide contains T2's estimates, which constitute forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.
2. Beekmann, S. E., Diekema, D. J., Chapin, K. C., & Doern, G. V. (2003). Effects of rapid detection of bloodstream infections on length of hospitalization and hospital charges. Journal of clinical microbiology, 41(7), 3119-3125.
3. Micek, S. T., Lloyd, A. E., Ritchie, D. J., Reichley, R. M., Fraser, V. J., & Kollef, M. H. (2005). Pseudomonas aeruginosa bloodstream infection: importance of appropriate initial antimicrobial treatment. Antimicrobial agents and chemotherapy, 49(4), 1306-1311.
4. Surenshine, R. H., Wright, M., Maragakis, L. L., Harris, A. D., Song, X., Hebden, J., ... Srinivasan, A. (2007). Multidrug-resistant Acinetobacter infection Mortality Rate and Length of Hospitalization. Emerging Infectious Diseases, 13(1), 97.
5. Kim, B. N., Woo, J. H., Kim, M. N., Ryu, J., & Kim, Y. S. (2002). Clinical implications of extended-spectrum β-lactamase-producing Klebsiella pneumoniae bacteraemia. Journal of Hospital Infection, 52(2), 99-106.4
6. Abramson, M. A., & Sexton, D. J. (1999). Nosocomial methicillin-resistant and methicillin-susceptible Staphylococcus aureus primary bacteremia: at what costs?. Infection Control & Hospital Epidemiology, 20(06), 408-411.
7. Stosor, V., Peterson, L. R., Postelnick, M., & Noskin, G. A. (1998). Enterococcus faecium bacteremia: does vancomycin resistance make a difference?. Archives of Internal Medicine, 158(5), 522-527.2. Abramson, et al. Infection Control & Hospital Epidemiology 20:06 (1999): 408-411
8. Golan, Y., Wolf, M. P., Pauker, S. G., Wong, J. B., & Hadley, S. (2005). Empirical anti-Candida therapy among selected patients in the intensive care unit: a cost-effectiveness analysis. Annals of internal medicine, 143(12), 857-869.

T2Candida Panel

The only FDA-cleared non-blood culture-based diagnostic panel for species detection

T2Candida Panel approved by the United States Food and Drug Administration (FDA) and granted CE Mark in 2014

Test is covered under existing DRG codes where hospitals get a fixed-sum reimbursement for the patient

T2Candida offers more sensitive detection of *Candida* than traditional blood culture - offering potential immediate savings for healthcare institutions

6.75M high-risk patient market opportunity (US)

Targeting 450 high prescribing hospitals

T2Candida Addresses Large Unmet Market Need

T2Biosystems®

6.75M high-risk patients

Only technology that can derive species-specific results directly from blood

Candida: The Facts

40%
Mortality Rate[1]

50%
of infections are missed by blood culture[2]

$130K
Average cost per patient[3]

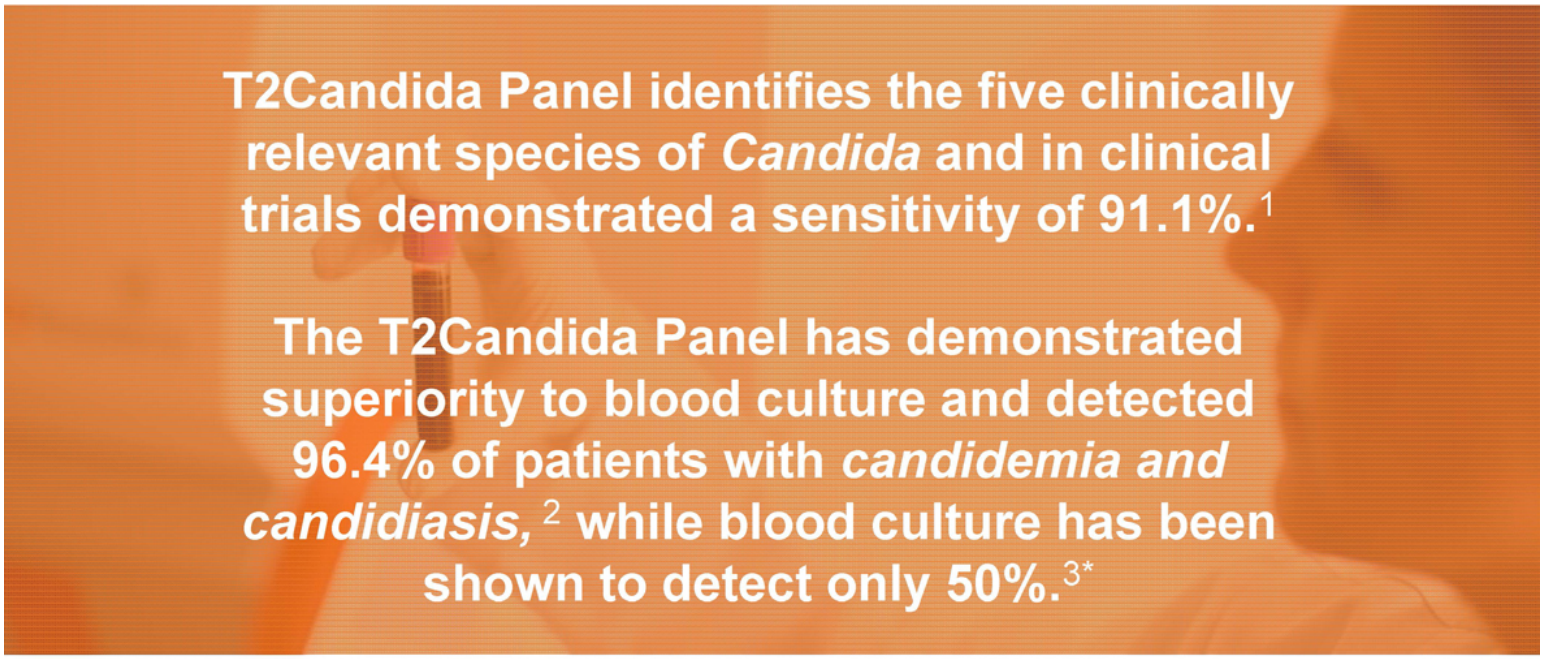
40
Days in the hospital[3]

1hr
Each hour of delayed treatment increases mortality risk nearly 8%[4]

4th Leading
hospital-acquired bloodstream infection[5]

135,000+
Patients per year[6]

1. Parkins, M. D., Sabuda, D. M., Elsayed, S., et. al. (2007). Adequacy of empirical antifungal therapy and effect on outcome among patients with invasive *Candida* species infections. Journal of Antimicrobial Chemotherapy, 60(3), 613-618.
2. Clancy, C. J., & Nguyen, M. H. (2013). Finding the "missing 50%" of invasive candidiasis: how nonculture diagnostics will improve understanding of disease spectrum and transform patient care. Clinical infectious diseases, 56(9), 1284-1292.
3. Gagne, J. J., Breitbart, R. E., Maio, V., et. al. (2006). Costs associated with candidemia in a hospital setting. P and T, 31(10), 586.
4. Kumar, A., Roberts, D., Wood, K. E., et. al. (2006). Duration of hypotension before initiation of effective antimicrobial therapy is the critical determinant of survival in human septic shock. Critical care medicine, 34(6), 1589-1596.
5. Wisplinghoff, H., Bischoff, T., Tallent, S. M., et. al. (2004). Nosocomial bloodstream infections in US hospitals: analysis of 24,179 cases from a prospective nationwide surveillance study. Clinical infectious diseases, 39(3), 309-317.
6. Pfaller, M. A., & Diekema, D. J. (2007). Epidemiology of invasive candidiasis: a persistent public health problem. Clinical microbiology reviews, 20(1), 133-163.



T2Candida Panel identifies the five clinically relevant species of *Candida* and in clinical trials demonstrated a sensitivity of 91.1%.[1]

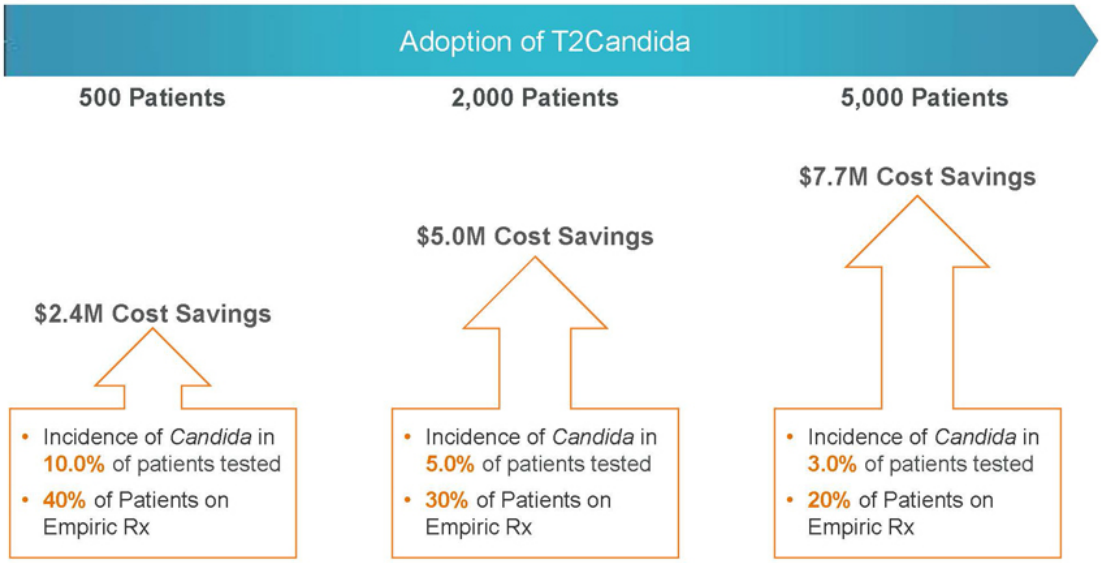
The T2Candida Panel has demonstrated superiority to blood culture and detected 96.4% of patients with *candidemia and candidiasis,* [2] **while blood culture has been shown to detect only 50%.**[3*]

1. Mylonakis, E., Clancy, C.J., Ostrosky-Zeichner, et. al. (2015). T2 Magnetic Resonance Assay for the Rapid Diagnosis of Candidemia in Whole Blood: A Clinical Trial. *Clinical Infectious Diseases*, ciu959.
2. Pfaller, M.A., Wolk, D.A., and Lowery, T.J. T2MR and T2Candida: novel technology for the rapid diagnosis of candidemia and invasive candidiasis. *Future Microbiology*; 0 (2015).
3. Clancy, C. J., & Nguyen, M. H. (2013). Finding the "missing 50%" of invasive candidiasis: how nonculture diagnostics will improve understanding of disease spectrum and transform patient care. Clinical infectious diseases, 56(9), 1284-1292.

*Demonstrated sensitivity in FDA pivotal study of 91.1%. Sensitivity of 96.4% includes 45 cases of proven invasive candidiasis and 10 cases of probable or suspected invasive candidiasis from reference 2 (Pfaller et al.)

Compelling Economics for Hospital Adoption

Example high-volume hospital scenarios in target market[1]



Adoption of T2Candida typically starts with testing a segment of the high risk patient population and increases as impact is experienced

1. Represents three hypothetical scenarios of potential cost savings using T2Candida to test high risk patients based on assumed levels of total annual patients. Annual cost savings are based on the following assumptions: (i) high risk patients tested, (ii) incidence of *Candida* and (iii) percentage of patients on empiric antifungal therapy. These hypothetical scenarios are not indicative of actual or projected cost-savings or other conditions depicted in this slide and are presented for purposes of illustration only. Based on Bilir, S. P., Ferrufino, C. P., Pfaller, M. A., and Munakata, J. (2015). The economic impact of rapid *Candida* species identification by T2Candida among high-risk patients. Future microbiology, (10) 7,1133-1144. - 2015

T2Candida Panel is Changing Treatment Protocols

Growing number of T2Candida customer success stories

Henry Ford Health System

- Statistically-powered study demonstrating $2.3MM in annual hospital savings
- Reduced median ICU length of stay by 7 days (p=0.009)
- Reduction in median total length of stay by 4 days/patient (p=0.164)
- 75% of negative patients had antifungals discontinued or deescalated[1]

LEE HEALTH Caring People. Inspiring Health.

- Median length of stay per patient reduced by 7 days
- Unnecessary antifungal therapy was avoided in 41% of patients
- Unnecessary antifungal therapy was discontinued after 1 dose in another 15% of patients
- Average net antifungal savings of approximately $195 for every patient tested[2]

Huntsville Hospital

- Reduction in duration of therapy and time to de-escalation in negative patients resulted in pharmacy savings of ~$280 per patient
- T2Candida detected 56% more positive patients than blood culture[3]

Riverside Community Hospital

- 83% of patients who tested positive received appropriate therapy within 6 hours of the blood draw and 100% in under 9 hours
- 0 patients who tested positive had been on antifungals prior to testing
- Therapy was discontinued for 100% of the patients who tested negative[4]

1. Wilson, N.M., Kenney, R.M., Tibbetts, R.J., et. al. T2 Magnetic Resonance Improves the Timely Management of Candidemia. Poster Presentation IDWeek 2016.
2. Estrada, S. J. Real World Value of T2Candida Lee Memorial Hospital. Slide Presentation ASM 2016.
3. Kateon H et al. Utilization of T2Candida Panel for the rapid detection of Candida species in a large community hospital. Poster Presentation IDWeek 2016.
4. Patel F, Young E. Antifungal Prescribing During Initial Implementation of Candidemia Early Detection and Species Identification Testing with T2Candida Panel. Poster Presentation IDWeek 2016.

T2Candida Detecting Invasive Candidiasis

T2Biosystems®

T2Candida is more sensitive for deep-seated candidiasis than blood-culture based methods

Università di Roma Tor Vergata

- 4 T2+/BC- but BAL culture positive for *C. albicans* (3) and *C. glabrata* (1)[1]

Future MICROBIOLOGY

- 12 proven cases of invasive candidiasis T2 positive/blood culture negative[2]

Clinical Infectious Diseases

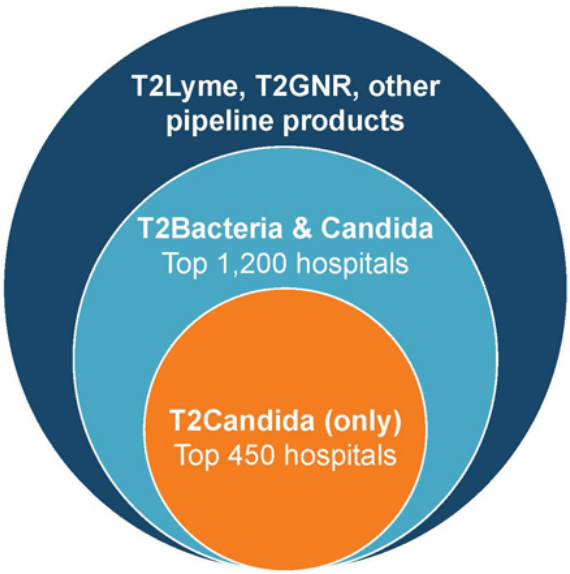
- Intra-abdominal candidiasis confirmed in FDA clinical trial
- 12+ negative blood cultures but detected by T2MR in hours
- Proven *C. albicans* infection with surgically obtained tissue culture[3]

1. Fontana, C. (2016) A new technology applied in an innovative hospital system: an example of T2Dx System use. [PowerPoint Slides]
2. Pfaller, M. A., Wolk, D. M., & Lowery, T. J. (2016). T2MR and T2Candida: novel technology for the rapid diagnosis of candidemia and invasive candidiasis. Future microbiology, 11(1), 103-117.
3. Mylonakis, E., Clancy, C. J., Ostrosky-Zeichner, L., Garey, K. W., Alangaden, G. J., Vazquez, J. A., ... & Zervou, F. N. (2015). T2 magnetic resonance assay for the rapid diagnosis of candidemia in whole blood: a clinical trial. Clinical Infectious Diseases, ciu959

Commercial Strategy

Significant Opportunity to Expand Target Hospitals

T2Bacteria Panel Increases Addressable Market of T2MR Technology Platform[1]



- T2Bacteria Panel enables rapid diagnostic testing in the Emergency Department market
  - 8.75 million high-risk patients
  - Top 1,200 hospitals in U.S.
- Lab directors more familiar with bacteria pathogens
  - Market study suggests lab directors 3x more likely to recommend adopting T2 technology with both T2Bacteria and T2Candida
- Healthy CPT code reimbursement of ~$290 per test
- Ongoing activities support customer adoption
  - RUO program provides early access to customers
  - Conversion of existing ~130 hospital installed base of T2Dx Instruments

1. This slide contains T2's future goals and aspirations, which constitute forward-looking statement that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.

Commercial Strategy[1]

T2Biosystems®

Continue the global expansion of the T2Candida Panel and plan for T2Bacteria Panel launch

17 U.S. Sales Organization

7 International Distribution Partners

5,000 Total Hospitals

~1,200 Targeted Hospitals

Highlight customer success stories to demonstrate the impact that T2MR technology is having on patient care and hospital economics	Increase the number of contracts with hospitals and gain access to additional high-risk patients within the customer base who could benefit from the T2Sepsis Solution	Prepare for the launch of T2Bacteria and expand the number of customers utilizing the T2Bacteria Research Use Only program

1. This slide contains T2's future goals and aspirations, which constitute forward-looking statement that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.

Commercial Penetration and Goals[1]

Commercial traction growing

~415K Estimated number of high-risk patients in hospital customer base

~130 Hospitals with access to the T2Dx platform

Through 6/30/2017

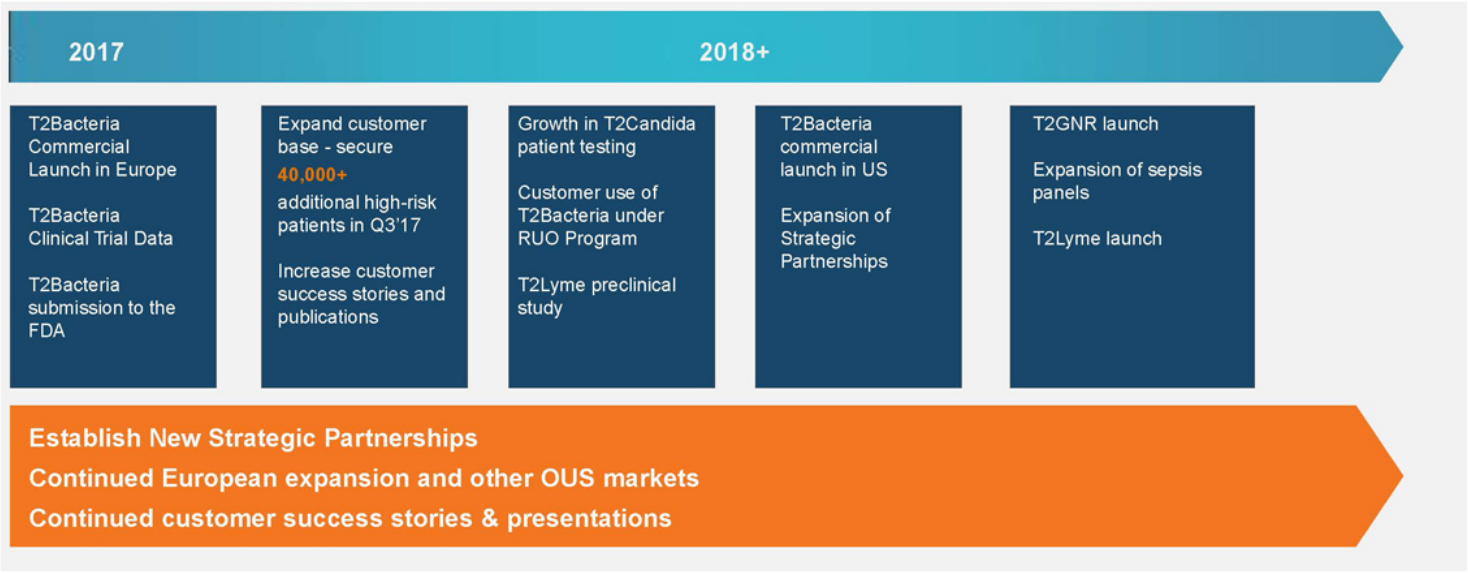
3Q'17 Target

40K Target to increase number of high-risk patients in hospital customer base for 3Q'17

1. This slide contains T2's future goals and aspirations, which constitute forward-looking statement that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.

Upcoming Milestones[1]

Ongoing opportunities for value creation



1. This slide contains T2's future goals and aspirations, which constitute forward-looking statement that are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. See "Forward-Looking Statements" on slide 2.

Strategic Collaboration

Endorsement of T2MR detection capabilities from pharma industry leader

Overview

Agreement with Allergan to create an additional panel on the T2Dx Instrument. The panel will be designed to identify drug resistance to enable physicians to provide targeted therapy faster.

Economics

Allergan will pay T2 Biosystems up to $4 million in development milestone payments.

Commercial

T2 Biosystems retains exclusive worldwide distribution rights. Allergan may cooperatively market T2 Biosystems' T2Candida, T2Bacteria and similar future products to targeted hospitals through Allergan's physician-facing institutional sales force.

Strategic Collaboration

Canon
CANON U.S. LIFE SCIENCES, INC.

T2Biosystems®

Initial focus on development of Lyme disease diagnostic panel

Overview

Multi-year, strategic agreement to jointly develop a novel diagnostic test panel to rapidly detect Lyme disease which the CDC estimates the annual number of cases in the US to be ~360,000.

Economics

T2 Biosystems receives development milestone payments of up to $8.5M. Canon made $39.7M equity investment in T2 Biosystems in September 2016.

Commercial

T2 Biosystems will retain exclusive worldwide commercialization rights to T2Lyme and Canon will receive product royalties on sales.

FINANCIAL SUMMARY

YTD - As of June 30, 2017	
Revenue YTD	$1.9M
Cash	$46.1M
Debt Line Availability	$10.0M
Common Shares Outstanding	30.8M
Q2'17 Product Revenue	$735K
Q2'17 QoQ Sequential Product Growth	16.5%
Q2'17 Cash Burn	$12.7M
Qtrly Cash Burn	Decreasing

>5% Investors – As of June 30, 2017[1]	
Canon Life Sciences	19.7%[2]
Goldman Sachs	13.6%[3]
Senvest Management	7.0%[4]
Polaris Ventures	6.6%[5]
Flagship Ventures	6.3%[6]
Tiger Management	5.6%[7]
Lagoda Investment Mgmt.	5.6%[8]

1. Based on 30,763,919 shares outstanding as of June 30, 2017.
2. Based on 6,055,341 shares held as of March 31, 2017 as disclosed in the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 21, 2017.
3. Based on 4,175,240 shares held as disclosed in a Form 4 filed with the SEC on June 6, 2017.
4. Based on 2,164,233 shares held as of March 31, 2017 as disclosed in the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 21, 2017.
5. Based on 2,018,450 shares held as disclosed in a Schedule 13D/A filed with the SEC on February 16, 2016.
6. Based on 1,950,583 shares held as of March 31, 2017 as disclosed in the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 21, 2017.
7. Based on 1,737,085 shares held as disclosed in Schedule 13G filed with the SEC on June 5, 2017.
8. Based 1,733,083 shares held as of March 31, 2017 as disclosed in the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 21, 2017.

Experienced Management Team

T2 management brings years of expertise in the diagnostics industry

Name	Background / Experience
John McDonough Chief Executive Officer	• ~35 years of executive management experience • Prior: Cytyc, Hologic, SoundBite Communications, Easel
Darlene Deptula-Hicks Chief Financial Officer & Senior VP	• 30+ years sr. financial executive, life sciences and medical technology Prior: Pieris Pharmaceuticals, Microline Surgical, iCAD
Joanne Spadoro, Ph.D. Chief Operations Officer	• 25+ years *in vitro* diagnostics and medical device experience • Prior: Immucor, Roche Molecular Systems
Stephen Hagan VP, Sales	• 25+ years diagnostics experience • Prior: HTG Molecular, Roche, Ventana, Abbott
Tom Lowery, Ph.D. Chief Scientific Officer	• 15+ years research and technical development experience • Prior: University of California, Berkeley
Rahul Dhanda Senior VP, Corporate Development & Marketing	• 15+ years business development & marketing experience • Prior: Boston Scientific, Interleukin Genetics, Mosaic Technologies
Michael Gibbs, Esq. VP & General Counsel	• 15+ years corporate legal experience • Prior: Keystone Dental, Bingham McCutchen, U.S. Marine Corps
Alec Barclay VP, Product Development & Program Management	• ~15 years product development and engineering experience • Prior: Becton Dickinson, Siemens Healthcare

Investment Highlights

A platform technology with multiple, billion-dollar franchise opportunities

T2MR

Innovative technology with broad applications

Market

$3B+ Initial market potential

T2Sepsis Solution

Provide species-specific results, direct from whole blood, in 3 to 5 hours[1]

Reimbursement

Products covered by existing reimbursement codes

Robust Pipeline

A new generation of diagnostics

Execution

High-risk patient access growing and several collaborations established

1. Mylonakis, E., Clancy, C. J., Ostrosky-Zeichner, L., Garey, K. W., Alangaden, G. J., Vazquez, J. A., ... & Zervou, F. N. (2015). T2 magnetic resonance assay for the rapid diagnosis of candidemia in whole blood: a clinical trial. *Clinical Infectious Diseases*, ciu959.

THANK YOU