

PROSPECTUS SUPPLEMENT
(To Prospectus dated December 19, 2014)



TransEnterix, Inc.

Up to \$25,000,000 of Shares of Common Stock

We have entered into a Controlled Equity OfferingSM Sales Agreement, or the Sales Agreement, with Cantor Fitzgerald & Co., or the Agent, to offer and sell up to \$25,000,000 from time to time of shares of our common stock, \$0.001 par value per share, under this prospectus supplement and the accompanying prospectus dated December 19, 2014.

In accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock at any time and from time to time through the Agent as our sales agent. Sales of the common stock, if any, will be made at market prices by any method that is deemed to be an “at the market” offering as defined in Rule 415 under the Securities Act of 1933, as amended, including sales made directly on the NYSE MKT and any other trading market for the common stock, and sales to or through a market maker other than on an exchange.

The aggregate compensation payable to Cantor Fitzgerald & Co., as sales agent, shall be equal to 3.0% of the gross sales price of the shares sold through the Agent pursuant to the Sales Agreement.

Subject to the terms and conditions of the Sales Agreement, the Agent will use its commercially reasonable efforts to sell on our behalf any shares to be offered by us under the Sales Agreement. The offering of our common stock pursuant to the Sales Agreement will terminate upon the earlier of (1) the sale of all the shares of our common stock offered by this prospectus supplement and the accompanying prospectus or (2) the termination of the Sales Agreement by us or by the Agent.

Our common stock is listed on the NYSE MKT under the symbol “TRXC.” On February 19, 2015, the last reported sale price of our common stock on the NYSE MKT was \$2.69 per share.

Investing in our common stock involves risks. You should review carefully the risks and uncertainties described under the heading “[Risk Factors](#)” on page S-6 of this prospectus supplement, page 5 of the accompanying prospectus and under similar headings in the other documents that are incorporated by reference in this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.



The date of this prospectus supplement is February 20, 2015

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus, dated December 19, 2014, are part of a “shelf” registration statement on Form S-3 (File No. 333-199998). This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of shares of our common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date, the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different or additional information. You should assume that the information in this prospectus supplement and the accompanying prospectus is accurate only as of the date on the front of the respective document and that any information that we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement or the accompanying prospectus or the time of any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

As used in this prospectus supplement, the terms “TransEnterix,” the “Company,” “we,” “us,” and “ours” refer to TransEnterix, Inc.

This prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or the accompanying prospectus are the property of their respective owners.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement and in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before investing in shares of our common stock. The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein. Before you decide to invest in shares of our common stock, to fully understand this offering and its consequences to you, you should read the entire prospectus supplement and the accompanying prospectus carefully, including the risk factors beginning on page S-6 of this prospectus supplement and on page 5 of the accompanying prospectus and the documents incorporated by reference herein and therein.

TransEnterix, Inc.

Overview

We are a medical device company that is focused on the development and future commercialization of a robotic-assisted surgical system called the SurgiBot™ System, or the SurgiBot System. The SurgiBot System is designed to utilize flexible instruments through articulating channels controlled directly by the surgeon, with robotic assistance, while the surgeon remains patient-side within the sterile field. The flexible nature of the SurgiBot System allows for multiple instruments to be introduced and deployed through a single site, thereby offering room for visualization and manipulation once inside the body. The SurgiBot System also allows for three-dimensional, or 3-D high definition vision technology.

We believe that future outcomes of minimally invasive surgery will be enhanced through our combination of more advanced tools and robotic functionality which are designed to: (i) empower surgeons with improved precision, dexterity and visualization; (ii) improve patient satisfaction and enable a desirable post-operative recovery; and (iii) provide a cost-effective robotic system, compared to existing alternatives today, for a potentially wide range of clinical applications. Our strategy is to focus on the development and future commercialization of the SurgiBot System.

The SurgiBot System is our powered and robotically-enabled next-generation platform technology. In developing our SurgiBot System, we have leveraged the extensive research and development and clinical activities related to our SPIDER® Surgical System, or SPIDER System, which is a manual laparoscopic device we launched in 2010 and used in over 3,500 procedures. We intend to make submissions seeking U.S. Food and Drug Administration, or FDA, clearance and CE Mark approval of the SurgiBot System by the middle of 2015.

Our Market Opportunity

While laparoscopy has improved the invasive nature of many previously open procedures, it still has many limitations. Traditional, or rigid, laparoscopy still requires multiple incisions to achieve the visualization and instrument triangulation required to perform successful surgery. Rigid laparoscopy also creates physical challenges by forcing the surgeon's hands and arms into awkward angles, requiring the surgeon to hold instruments in fixed positions for long periods of time, and requiring an assistant to stabilize and move a laparoscopic camera. Another challenge associated with rigid laparoscopic surgery is the creation of a cumbersome and potentially tissue-damaging fulcrum at the patient's abdominal wall where instruments are manipulated. Nearly all laparoscopic instruments are rigid instruments that lack the internal articulation required to enhance dexterity in complex tasks. Most laparoscopic surgeries are performed with two dimensional, or 2-D, visualization the operative field, making depth perception difficult.

Robotic and computer controlled assistance have developed as technologies that offer the potential to improve upon many aspects of the laparoscopic surgical experience. Hundreds of thousands of robotic-assisted surgical procedures are now performed each year worldwide, but they still represent a small fraction of total laparoscopic procedures performed. While initial widespread adoption of robotic-assisted surgery was focused on urologic and gynecologic procedures that were primarily performed in an open fashion prior to robotics, recently developed robotic approaches have been applied to many other clinical applications, particularly in general surgery. Despite recent advances, we believe there remain many limitations created by current robotic-assisted surgery systems used in connection with laparoscopic surgeries. For example, existing robotic systems require a large capital investment. Moreover, existing robotic systems require the surgeon to sit outside of the sterile field, requiring the surgeon leave the operating room to “scrub in” should it become necessary to enter the sterile field. There are further challenges in maneuvering the patient once a large, multi-arm robotic system is fixed in place.

Both traditional laparoscopic surgery and robotic-assisted surgery have begun to migrate towards methods and technologies that may allow for fewer incisions in the patient. The first major attempts at reduced incision or single incision surgery were through access ports that utilized long, rigid instruments. These instruments were usually crowded in a small space, often at the patient’s umbilicus, along with a laparoscopic camera for visualization. This configuration resulted in instrument collision, difficulty in establishing triangulation and working space for the instruments, and, often, difficulty associated with the crossing of instruments. More recent attempts at reduced incision surgery have leveraged robotic technology, but these efforts have diminished some of the benefits typically offered by robotic surgical systems and are plagued by some of the limitations of currently available robotic systems.

Robotic technologies have experienced strong adoption among large hospitals, academic centers, and teaching hospitals in the U.S. However, a majority of hospitals within the U.S. have not adopted robotic technology for abdominal surgeries due to cost and complexity, as well as the other limitations mentioned above. In addition to these hospitals, there are over 5,000 surgery centers within the U.S. that have very low adoption of robotic technology for abdominal surgeries. We believe a smaller, more affordable surgical robot would provide the right solution for potential customers, particularly in hospital and surgery center settings.

SurgiBot System Robotic Platform

The SurgiBot System is currently in development and is designed as a single-incision, patient-side robotic-assisted surgery system. The system is intended to bring many of the advantages of robotic assistance to single incision laparoscopic surgery while mitigating many of the drawbacks of existing robotic-assisted surgery systems.

The SurgiBot System is composed primarily of three key components:

- **The SurgiBot™ Base:** a reusable robotic base that provides the platform of the system;
- **The EndoDrive:** a single port, surgical access device for abdominal surgery that interfaces with the SurgiBot Base, which allows for the insertion of surgical instruments for the surgical procedures being performed; and
- **The Positioning Arm:** a reusable arm that supports and repositions the SurgiBot Base at the operating table.

Key design features of the SurgiBot System are:

- **Patient side:** The SurgiBot System is positioned next to the operating table, thereby allowing the surgeon, as operator, to remain in the sterile field next to the patient;
- **Precision with scaling:** The SurgiBot System allows the user to adjust the level of mechanized movement using scaled ratios;

- **Strength:** The SurgiBot System features powered motion driven by motors controlled by the surgeon;
- **Ergonomics:** The SurgiBot System stabilizes multiple instruments and a laparoscope and allows the surgeon to reposition their hands in an ergonomic fashion;
- **Internal Triangulation:** The SurgiBot System utilizes a deployment mechanism to achieve triangulation of multiple instruments inside the body as contrasted with other single-port robotic systems that rely on crossing instruments at the patient's abdominal wall. The SurgiBot System allows for triangulation that can be repositioned in the surgical field during a procedure and be maintained at positions throughout a body cavity;
- **Direct surgeon connection to the instruments:** The SurgiBot System allows the surgeon-operator to maintain human tactile feedback along several degrees of motion. Existing robotic systems lack any such tactile feedback; and
- **Integration with 3-D Vision System:** The SurgiBot System integrates a three-dimensional scope and vision system for laparoscopic surgical visualization that can be viewed by all operating room personnel, not just the surgeon.

We believe the SurgiBot System will address the needs of the large and growing, yet underserved, population of physicians and hospitals who wish to offer the benefits of robotic-assisted surgery without the functional and economic challenges of current solutions. The SurgiBot System is designed for a potentially wide range of clinical applications, and we believe the system will be particularly attractive for general, bariatric and gynecologic surgery. In addition, we believe that the SurgiBot System can be offered to hospitals and ambulatory surgery centers, or ASCs, at a cost advantage relative to existing robotic surgery systems, and we expect hospitals, ASCs and physicians will be able to utilize existing laparoscopic procedure codes to receive reimbursement for procedures performed with the SurgiBot System.

Our Strategy

Our strategy is to focus our resources on the development and commercialization of the SurgiBot System. We are planning to make the product available, subject to our obtaining the requisite regulatory and government clearances.

We believe that:

- there are a number of hospitals and an increasing number of ambulatory surgery centers in the U.S. and internationally that could benefit from the addition of robotic-assisted minimally invasive surgery at a lower cost of entry than existing robotic-assisted surgery systems;
- surgeons can benefit from the ease of use, 3-D visualization and precision of robotic-assisted surgery while remaining patient-side within the sterile field, consistent with current laparoscopic surgery procedures; and
- patients will continue to seek a minimally invasive option, offering minimal scarring and fewer incisions, for many common general abdominal and gynecologic surgeries.

Corporate Information

We were organized as a Delaware corporation on August 19, 1988. Our principal executive offices are located at 635 Davis Drive, Suite 300, Morrisville, NC 27560. Our phone number is (919) 765-8400 and our Internet address is www.transenterix.com. In December 2013, we changed our name to TransEnterix, Inc. from SafeStitch Medical, Inc. The information on our website or any other website is not incorporated by reference in this prospectus supplement and does not constitute a part of this prospectus supplement.

THE OFFERING

Common stock to be offered by us:	Up to an aggregate of \$25,000,000 of shares of our common stock, par value \$0.001 per share pursuant to the Sales Agreement with Cantor Fitzgerald & Co. as our Agent. See “Plan of Distribution” beginning on page S-12 of this prospectus supplement.
Manner of offering:	“At the market” offering made from time to time through our Agent. See “Plan of Distribution” beginning on page S-12 of this prospectus supplement.
Use of proceeds:	We currently expect to use the proceeds from this offering for research and development, sales, marketing and commercialization related to the SurgiBot System, working capital and other general corporate purposes. See “Use of Proceeds” on page S-10 of this prospectus supplement.
NYSE MKT symbol:	“TRXC.”
Risk Factors:	Investing in our common stock involves a high degree of risk. See “Risk Factors” beginning on page S-6 of this prospectus supplement and other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus.

RISK FACTORS

Investing in our common stock involves a high degree of risk. For a discussion of the factors you should carefully consider before deciding to purchase any of our securities, please review “Part I, Item 1A—Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the U.S. Securities and Exchange Commission, or SEC, on February 20, 2015 which is incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety, together with the other information contained in this prospectus supplement, the accompanying prospectus and the documents we have incorporated by reference. The risks and uncertainties described in the documents incorporated by reference are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of those risks actually occurs, our business, financial condition and results of operations would suffer. In that event, the market price of our common stock could decline, and you may lose all or part of your investment in our common stock.

Risks Related to This Offering

The common shares offered under this prospectus supplement and the accompanying prospectus may be sold in “at-the-market” offerings, and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares under this prospectus supplement and the accompanying prospectus at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience declines in the value of their shares as a result of share sales made at prices lower than the prices they paid.

Management will have broad discretion as to the use of the net proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our results of operations or the market value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development and approval of our products and cause the price of our common stock to decline.

Our stockholders have experienced dilution of their percentage ownership of our stock and may experience additional dilution in the future.

On September 3, 2013, TransEnterix Surgical, Inc., a Delaware corporation formerly known as TransEnterix, Inc., or TransEnterix Surgical, and SafeStitch Medical, Inc., a Delaware corporation, or SafeStitch, consummated a merger transaction whereby TransEnterix Surgical merged with a merger subsidiary of SafeStitch, with TransEnterix Surgical as the surviving entity in the merger, or the Merger. As consequence of the Merger, TransEnterix Surgical became a wholly owned subsidiary of SafeStitch. On December 6, 2013, SafeStitch changed its name to TransEnterix, Inc.

As a result of the Merger, we issued new shares of common stock to certain former TransEnterix Surgical stockholders, representing approximately 65% of the total outstanding voting power of all our stockholders immediately following the closing of the Merger. The issuance of these shares caused existing stockholders at the time of the Merger to experience immediate and significant dilution in their percentage ownership of our outstanding common stock. In addition, the private placement issuance of our Series B Convertible Preferred Stock, par value \$0.01 per share, or the Series B Preferred Stock, in September 2013 caused substantial dilution

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to our stockholders, as each share of Series B Preferred Stock was converted into ten shares of our common stock on December 6, 2013, and our stockholders experienced additional dilution in our April 2014 \$56 million common stock public offering.

If you purchase the common stock sold in this offering, you will experience immediate dilution as a result of this offering.

Because the price per share of our common stock being offered may be higher than net tangible book value per share of our common stock, you will experience dilution to the extent of the difference between the offering price per share of common stock you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value as of December 31, 2014, was approximately \$25.7 million, or \$0.41 per share of common stock. Net tangible book value per share is equal to our total tangible assets minus total liabilities, all divided by the number of shares of common stock outstanding.

Because the sales of the shares offered hereby will be made directly into the market or in negotiated transactions, the prices at which we sell these shares will vary and these variations may be significant. Purchasers of the shares we sell, as well as our existing shareholders, will experience significant dilution if we sell shares at prices significantly below the price at which they invested.

If you purchase shares of our common stock in this offering you may experience future dilution as a result of future equity offerings or other equity issuances.

In order to raise additional capital, we may in the future offer and issue additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

In addition, we have a significant number of stock options outstanding. To the extent that outstanding stock options have been or may be exercised or other shares issued, you may experience further dilution. Further, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Directors, executive officers, principal stockholders and affiliated entities own a significant percentage of our capital stock, and they may make decisions that you do not consider to be in the best interests of our stockholders.

Our directors, executive officers, principal stockholders and affiliated entities beneficially owned, in the aggregate, approximately 47% of our outstanding voting securities. As a result, if some or all of them acted together, they would have the ability to exert substantial influence over the election of our board of directors and the outcome of issues requiring approval by our stockholders. This concentration of ownership may also have the effect of delaying or preventing a change in control of the Company that may be favored by other stockholders. This could prevent transactions in which stockholders might otherwise recover a premium for their shares over current market prices.

In connection with the Merger, we entered into a voting and lock-up agreement with certain of our stockholders pursuant to which such stockholders agreed to vote to approve certain corporate actions following the Merger.

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In connection with the Merger and the related private placement transaction, stockholders holding an aggregate of 93% of our common stock on the effective date of the Merger, and members of our Board of Directors, entered into lock-up and voting agreements, each, a Voting Agreement, pursuant to which such persons agreed, subject to certain exceptions, not to sell, transfer or otherwise convey any of the Company's securities held by them, or, collectively, Covered Securities, for one year following the Merger closing date. The Voting Agreements provide that such persons may sell, transfer or convey: (i) up to 50% of their respective Covered Securities commencing on September 3, 2014, the one-year anniversary of the Merger closing date; and (ii) up to an aggregate of 75% of their respective Covered Securities during the period commencing on March 3, 2015, the eighteen-month anniversary of the Merger closing date. The restrictions on transfer contained in the Voting Agreements cease to apply to the Covered Securities on September 3, 2015, the second anniversary of the Merger closing date. In accordance with a Registration Rights Agreement dated September 3, 2013, we included many of these stockholders as selling stockholders on the shelf registration statement of which this prospectus supplement and accompanying prospectus are a part, registering, for the account of such selling stockholders, the Covered Securities that were released from the transfer restrictions of the Voting Agreement on September 3, 2014. Sales of our common stock by such selling stockholders could have a negative impact on the trading price of our common stock and increase the volatility of our common stock trading price.

The market price of our common stock has been, and may continue to be, highly volatile, and such volatility could cause the market price of our common stock to decrease and could cause you to lose some or all of your investment in our common stock.

During the two years ended December 31, 2014, the market price of our common stock fluctuated from a high of \$14.00 per share to a low of \$0.22 per share, and our stock price continues to fluctuate. The market price of our common stock may continue to fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- the announcement of new products or product enhancements by us or our competitors;
- developments concerning intellectual property rights and regulatory approvals;
- variations in our and our competitors' results of operations;
- changes in earnings estimates or recommendations by securities analysts, if our common stock is covered by analysts;
- developments in the medical device industry;
- the results of product liability or intellectual property lawsuits;
- future issuances of common stock or other securities;
- the addition or departure of key personnel;
- announcements by us or our competitors of acquisitions, investments or strategic alliances; and
- general market conditions and other factors, including factors unrelated to our operating performance.

Further, the stock market in general, and the market for medical device companies in particular, has recently experienced extreme price and volume fluctuations. The volatility of our common stock is further exacerbated due to its low trading volume. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock and the loss of some or all of your investment.

Trading of our common stock is limited, and trading restrictions imposed on us by applicable regulations may further reduce trading in our common stock, making it difficult for our stockholders to sell their shares; and future sales of common stock could reduce our stock price.

Trading of our common stock is currently conducted on the NYSE MKT. The liquidity of our common stock is limited, not only in terms of the number of shares that can be bought and sold at a given price, but also as

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it may be adversely affected by delays in the timing of transactions and reduction in security analysts' and the media's coverage of us, if at all. As of December 31, 2014, approximately 47% of the issued and outstanding shares of our common stock were held by officers, directors and beneficial owners of at least 10% of our outstanding shares, each of whom is subject to certain restrictions with regard to trading our common stock. These factors may result in different prices for our common stock than might otherwise be obtained in a more liquid market and could also result in a larger spread between the bid and asked prices for our common stock. In addition, without a large public float, our common stock is less liquid than the stock of companies with broader public ownership, and, as a result, the trading prices of our common stock may be more volatile. In the absence of an active public trading market, an investor may be unable to liquidate his investment in our common stock. Trading of a relatively small volume of our common stock may have a greater impact on the trading price of our stock than would be the case if our public float were larger. We cannot predict the prices at which our common stock will trade in the future, if at all.

Sales by stockholders of substantial amounts of our shares of common stock, the issuance of new shares of common stock by us or the perception that these sales may occur in the future could materially and adversely affect the market price of our common stock, and you may lose all or a portion of your investment in our common stock.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements, other than statements of historical fact, included or incorporated by reference in this prospectus supplement regarding our strategy, future operations, collaborations, intellectual property, cash resources, financial position, future revenues, projected costs, prospects, plans and objectives are forward-looking statements. The words “believes,” “anticipates,” “estimates,” “plans,” “expects,” “intends,” “may,” “could,” “should,” “potential,” “likely,” “projects,” “continue,” “will,” and “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. There are a number of important factors that could cause our actual results to differ materially from those indicated or implied by forward-looking statements. These important factors include those set forth above under the heading “Risk Factors” in this prospectus supplement, the accompanying prospectus and in the reports incorporated by reference herein and therein. These factors and the other cautionary statements made in this prospectus supplement or incorporated by reference herein should be read as being applicable to all related forward-looking statements whenever they appear in this prospectus supplement or in the reports incorporated by reference herein. In addition, any forward-looking statements represent our estimates only as of the date that this prospectus supplement is filed with the SEC, and should not be relied upon as representing our estimates as of any subsequent date. We do not assume any obligation to update any forward-looking statements. We disclaim any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

The amount of proceeds from this offering will depend on the number of shares sold and the market price at which they are sold. We currently intend to use the net proceeds of this offering for research and development, sales, marketing and commercialization related to the SurgiBot System, working capital and other general corporate purposes. While we have estimated the particular uses for the net proceeds of this offering, we have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering for any purpose, and investors will be relying on the judgment of our management with regard to the use of these net proceeds. Pending use of the net proceeds as described above, we intend to invest the net proceeds in money-market funds or U.S. treasuries until we use them for their stated purpose.

DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of common stock after this offering.

The net tangible book value of our common stock as of December 31, 2014, was approximately \$25.7 million, or approximately \$0.41 per share. Net tangible book value per share represents the amount of our total tangible assets less total liabilities divided by the total number of shares of our common stock outstanding.

Dilution per share to new investors represents the difference between the amount per share paid by purchasers for our common stock in this offering and the net tangible book value per share of our common stock immediately following the completion of this offering.

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After giving effect to the sale of shares of common stock offered by this prospectus supplement at an assumed public offering price of \$2.69 per share (the last reported sale price of our common stock on the NYSE MKT on February 19, 2015), and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2014 would have been approximately \$49.9 million, or approximately \$0.69 per share. This represents an immediate increase in net tangible book value of approximately \$0.28 per share to our existing stockholders and an immediate dilution in as adjusted net tangible book value of approximately \$2.00 per share to purchasers of our common stock in this offering, as illustrated by the following table:

Assumed public offering price per share	\$2.69
Net tangible book value per share at December 31, 2014	\$0.41
Increase in net tangible book value per share attributable to investors purchasing our common stock in this offering	<u>0.28</u>
As adjusted net tangible book value per share as of December 31, 2014 after giving effect to this offering	<u>0.69</u>
Dilution per share to investors purchasing our common stock in this offering	<u>\$2.00</u>

The table above assumes for illustrative purposes that an aggregate of 9,293,680 shares of our common stock are sold at a price of \$2.69 per share, the last reported sale price of our common stock on the NYSE MKT on February 19, 2015, for aggregate gross proceeds of approximately \$25,000,000. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$2.69 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$25,000,000 is sold at that price, would increase our as adjusted net tangible book value per share after the offering to \$0.71 per share and would increase the dilution in net tangible book value per share to new investors to \$2.98 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$2.69 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$25,000,000 is sold at that price, would decrease our as adjusted net tangible book value per share after the offering to \$0.64 per share and would decrease the dilution in net tangible book value per share to new investors to \$1.05 per share, after deducting commissions and estimated aggregate offering expenses payable by us.

The information discussed above is illustrative only and will adjust based on the actual public offering price and other terms of this offering determined at pricing.

The above table is based on 63,182,806 shares outstanding as of December 31, 2014, and excludes as of such date:

- 5,392,241 shares of common stock issuable upon the exercise of outstanding options granted under our stock option plans at a weighted average exercise price of \$2.82 per share;
- 1,313,719 shares of common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$1.70 per share;
- 140,000 shares of common stock issuable upon vesting of outstanding restricted stock units; and
- 2,186,360 shares of common stock available for future issuance under our stock option plans.

To the extent that outstanding options are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

PRICE RANGE OF COMMON STOCK

Our common stock began trading on the NYSE MKT on April 2, 2014 under the symbol “TRXC.” From December 9, 2013 to April 1, 2014, our common stock was quoted on the OTCBB under the symbol “TRXC.” From August 25, 2011 to December 6, 2013, our common stock was quoted on the OTCBB under the symbol “SFES.”

The following table sets forth the high and low bid prices per share of our common stock as reported on the NYSE MKT or in the over-the-counter market as reported on the OTCBB, as applicable, for the period indicated. The bid prices represent inter-dealer transactions, without adjustments for retail mark-ups, mark-downs or commissions and may not necessarily represent actual transactions.

	Bid Prices	
	High	Low
2015		
First Quarter (through February 19, 2015)	\$ 3.50	\$ 2.66
2014		
First Quarter	\$ 2.59	\$ 1.51
Second Quarter	14.00	1.87
Third Quarter	5.50	3.43
Fourth Quarter	4.54	1.40
2013		
First Quarter	\$ 2.50	\$1.275
Second Quarter	3.275	1.75
Third Quarter	8.60	1.80
Fourth Quarter	8.80	6.45

The closing sale price of our common stock as reported on the NYSE MKT on February 19, 2015 was \$2.69 per share. As of February 16, 2015, there were approximately 266 record holders of our common stock (counting all shares held in single nominee registration as one stockholder). This does not include the number of persons whose stock is in nominee or “street name” accounts through brokers.

PLAN OF DISTRIBUTION

We have entered into a Controlled Equity OfferingSM Sales Agreement, dated February 20, 2015 with Cantor, or the Sales Agreement, under which we may issue and sell shares of our common stock having an aggregate gross sales price of up to \$25,000,000 from time to time through Cantor acting as agent. Sales of the shares of common stock, if any, may be made on the NYSE MKT at market prices and such other sales as agreed upon by us and Cantor. The Sales Agreement has been filed as an exhibit to a Current Report on Form 8-K filed under the Exchange Act and is incorporated by reference in this prospectus supplement.

Upon delivery of a placement notice and subject to the terms and conditions of the Sales Agreement, Cantor may sell our common stock by any method permitted by law deemed to be an “at-the-market” offering as defined in Rule 415 promulgated under the Securities Act, including sales made directly on the NYSE MKT, on any other existing trading market for our common stock or to or through a market maker. Cantor may also sell our common stock by any other method permitted by law, including in privately negotiated transactions. We may instruct Cantor not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Cantor may suspend the offering of common stock upon notice and subject to other conditions.

We will pay Cantor commissions, in cash, for its services in acting as agent in the sale of our common stock. Cantor will be entitled to compensation at a commission rate of up to 3.0% of the aggregate gross proceeds

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from each sale of our common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. If so requested by Cantor, and unless otherwise agreed, we will reimburse Cantor for certain specified expenses, including the fees and disbursements of its legal counsel. We estimate that the total expenses for the offering, excluding compensation and reimbursements payable to Cantor under the terms of the Sales Agreement, will be approximately \$100,000.

Settlement for sales of common stock will occur on the third business day following the date on which any sales are made, or on some other date that is agreed upon by us and Cantor in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Cantor may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Cantor will use its commercially reasonable efforts, consistent with its normal sales and trading practices and applicable state and federal laws, rules and regulations and the rules of the NYSE MKT, to solicit offers to purchase the common stock shares under the terms and subject to the conditions set forth in the Sales Agreement. In connection with the sale of the common stock on our behalf, Cantor will be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of Cantor will be deemed to be underwriting commissions or discounts. We or Cantor may suspend the offering of shares of common stock by notifying the other. We have agreed to provide indemnification and contribution to Cantor against certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the Sales Agreement will terminate upon the earlier of (i) the sale of all shares of our common stock subject to the Sales Agreement, or (ii) termination of the Sales Agreement as permitted therein. We and Cantor may each terminate the Sales Agreement at any time upon 10 days’ prior notice.

Cantor and its affiliates may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, Cantor will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus.

This prospectus in electronic format may be made available on a website maintained by Cantor and Cantor may distribute this prospectus electronically.

LEGAL MATTERS

Certain legal matters with respect to the securities offered hereby have been passed upon by Ballard Spahr LLP and certain legal matters will be passed upon for the Agent by Cooley LLP.

EXPERTS

The consolidated financial statements as of December 31, 2014 and 2013, and for each of the two years in the period ended December 31, 2014, and management’s assessment of the effectiveness of internal control over financial reporting as of December 31, 2014, incorporated by reference in this prospectus supplement have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, (the report on the consolidated financial statements contains an explanatory paragraph regarding the Company’s ability to continue as a going concern) incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

WHERE CAN YOU FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed with the SEC under the Securities Act. This prospectus supplement and the accompanying prospectus do not contain all of the information included in the registration statement. We have omitted certain parts of the registration statement in accordance with the rules and regulations of the SEC. For further information, we refer you to the registration statement, including its exhibits and schedules. Statements contained in this prospectus supplement and the accompanying prospectus about the provisions or contents of any contract, agreement or any other document referred to are not necessarily complete. Please refer to the actual exhibit for a more complete description of the matters involved.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings, including the registration statement and exhibits, are available to the public at the SEC's website at <http://www.sec.gov>. You may also read, without charge, and copy the documents we file, at the SEC's public reference rooms at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms.

We maintain an Internet site at www.transenterix.com. We have not incorporated by reference into this prospectus supplement or the accompanying prospectus the information on our website, and you should not consider any of the information posted on or hyper-linked to our website to be a part of this prospectus supplement or the accompanying prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with the SEC, which means we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus supplement, and certain information that we will later file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below as well as any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement until we sell all of the securities under this prospectus supplement, except that we do not incorporate any document or portion of a document that is "furnished" to the SEC, but not deemed "filed." The following documents filed with the SEC are incorporated by reference in this prospectus supplement and the accompanying prospectus:

- our Annual Report on Form 10-K for the year ended December 31, 2014 filed with the SEC on February 20, 2015;
- our Current Reports on Form 8-K filed with the SEC on February 6, 2015 (Items 5.02 and 9.01); and on February 20, 2015 (Items 1.01 and 9.01); and
- the description of the Company's common stock contained in the Registration Statement on Form 8-A filed on April 7, 2014, and any amendments to such Registration Statement filed subsequently thereto, including all amendments or reports filed for the purpose of updating such description.

We will furnish to you, on written or oral request, a copy of any or all of the documents that have been incorporated by reference, including exhibits to these documents. You may request a copy of these filings at no cost by writing or telephoning our Secretary at the following address and telephone number:

TransEnterix, Inc.
Attention: Joshua Weingard, Chief Legal Officer and Secretary
635 Davis Drive, Suite 300
Morrisville, NC 27560
Telephone No.: (919) 765-8400

PROSPECTUS



\$100,000,000
Common Stock
Preferred Stock
Warrants
Debt Securities
Units

19,516,706 shares of Common Stock

We may offer and sell from time to time, in one or more offerings, up to \$100,000,000 of any combination of common stock, preferred stock, warrants and debt securities, either individually or units consisting of any two or more of such securities. We may also offer securities upon the exercise of warrants.

Each time we sell securities pursuant to this prospectus, we will provide the specific terms of the securities offered in a supplement to this prospectus. The prospectus supplements will also describe the specific manner in which we will offer these securities and may also supplement, update or amend information contained in this prospectus. You should read this prospectus and any related prospectus supplement carefully before you invest in our securities.

The securities being registered for the account of the Company may be sold on a delayed or continuous basis directly by us, through dealers, agents or underwriters designated from time to time, or through any combination of these methods. If any dealers, agents or underwriters are involved in the sale of the securities in respect of which this prospectus is being delivered, we will disclose their names and the nature of our arrangements with them in any prospectus supplement.

This prospectus also relates to the offer and sale, from time to time, of up to 19,516,706 shares of our common stock, par value \$0.001 per share, held by the "selling stockholders" named on page 9 of this prospectus or in a prospectus supplement.

The shares of common stock registered for the account of the selling stockholders may be sold from time to time by the selling stockholders directly or through one or more broker-dealers, in one or more transactions on the NYSE MKT, in the over-the-counter market, in negotiated transactions or otherwise, at prices related to the prevailing market prices or at negotiated prices, all as more fully described in the section entitled "Plan of Distribution" beginning on page 10 of this prospectus. We will not receive any proceeds from the sale of these shares of common stock offered by the selling stockholders. All costs and expenses incurred in connection with the registration under the Securities Act of 1933, as amended, or Securities Act, of the offering made hereby will be paid by us, other than any brokerage fees and commissions, fees and disbursements of legal counsel for the selling stockholders and stock transfer and other taxes attributable to the sale of the shares, which will be paid by the selling stockholders. We are registering the offer and sale of these shares pursuant to certain registration rights granted to the selling stockholders. The registration of these shares of common stock does not necessarily mean that any of the shares will be offered or sold by the selling stockholders.

Our common stock is traded on the NYSE MKT under the symbol "TRXC." On December 18, 2014, the closing price of our common stock was \$2.35 per share.

Investing in our securities involves a high degree of risk. See "[RISK FACTORS](#)" on page 5.

This prospectus may not be used to offer or sell securities unless accompanied by a prospectus supplement for the securities being sold.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus is December 19, 2014.

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You should rely only on the information contained in this prospectus and in any prospectus supplement (including in any documents incorporated by reference herein or therein). We have not authorized anyone to provide you with any different information. We are offering to sell our securities, and seeking offers to buy, only in jurisdictions where offers and sales are permitted.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our securities. You should read this entire prospectus carefully, especially the “Risk Factors” section beginning on page 8 and our financial statements and the related notes incorporated by reference into this prospectus, before making an investment decision.

Company Overview

On September 3, 2013, SafeStitch Medical, Inc. completed a merger with TransEnterix Surgical, Inc. under which TransEnterix Surgical became a wholly owned subsidiary of SafeStitch. On December 6, 2013, SafeStitch changed its name to TransEnterix, Inc. and its trading symbol to “TRXC.” In connection with the merger, we also consummated a financing by the sale of shares of Series B Convertible Preferred Stock.

In this prospectus, when we refer to the registrant as a combination of SafeStitch and TransEnterix Surgical after giving effect to the merger, we use the terms “TransEnterix,” the “Company,” “we,” “us,” and “ours”. When we refer to the historical business, operations and corporate status of the parent in the merger we use the term “SafeStitch” and when we refer to the historical business, operations and corporate status of the subsidiary in the merger, we use the term “TransEnterix Surgical.”

We are a medical device company that is focused on the development and future commercialization of a robotic assisted surgical system called the SurgiBot system. The SurgiBot system is designed to utilize flexible instruments through articulating channels controlled directly by the surgeon, with robotic assistance, while the surgeon remains scrubbed within the sterile field. The flexible nature of the SurgiBot system would allow for multiple instruments to be introduced and deployed through a single site, thereby offering room for visualization and manipulation once in the body. The SurgiBot system also integrates three-dimensional (3-D) high definition vision technology. We have also commercialized the SPIDER® Surgical System, a manual laparoscopic system in the United States, Europe and the Middle East. The SPIDER System utilizes flexible instruments and articulating channels that are controlled directly by the surgeon, allowing for multiple instruments to be introduced via a single site. We also currently manufacture multiple instruments that can be deployed using the SPIDER System currently and which are being adapted for use with the SurgiBot system.

The SurgiBot system is a product candidate in development for which regulatory clearance or approval has not yet been sought from the U.S. Food and Drug Administration, or FDA, or other regulatory bodies. The SPIDER System was cleared for commercialization as a Class II medical device by the FDA in July 2009. The SPIDER System received CE Mark approval to be commercialized in the European Union. We have subsequently decreased our SPIDER System commercialization efforts and are focused on developing the SurgiBot system.

We have developed, received 510(k) clearance for and are commercializing our Flex Ligating Shears, a flexible instrument used with the SPIDER System to provide the surgeon with the ability to attain precise angles when cutting, ligating and dividing tissue in a laparoscopic procedure. We are developing a version of the Flex Ligating Shears for use with the SurgiBot system.

We operate in one business segment.

We believe that future outcomes of minimally invasive surgery will be enhanced through our combination of more advanced tools and robotic functionality which will: (i) empower surgeons with improved precision, dexterity and visualization; (ii) improve patient satisfaction and post-operative recovery; and (iii) provide a cost-effective robotic system, compared to existing alternatives today, for a potentially wide range of clinical

applications. Our strategy is to focus our primary efforts on the development and commercialization of the SurgiBot system.

Reverse Stock Split

On March 31, 2014, we effected a one-for-five reverse stock split of our common stock. The reverse stock split was effected in connection with our application to list our common stock for trading on the NYSE MKT to assist in meeting the NYSE MKT minimum bid price requirement of a stock price of at least \$2.00 per share. On April 1, 2014, we received authorization to list our shares on the NYSE MKT, subject to completion of a public offering of common shares that occurred on April 21, 2014.

The Merger

On August 13, 2013, SafeStitch, a wholly owned subsidiary of SafeStitch named Tweety Acquisition Corp., and TransEnterix Surgical entered into an agreement and plan of merger, amended on August 30, 2013, under which the parties agreed to enter into the merger described above. The main rationale for the merger was to strengthen capital raising opportunities for TransEnterix Surgical's primary product candidate, the SurgiBot™ System (described below), through the private placement financing described below, and the ability to access public markets for future financings. Pursuant to the merger agreement, each share of TransEnterix Surgical's capital stock issued and outstanding immediately before the merger was converted into the right to receive 1.1533 shares of SafeStitch's common stock, other than those shares of TransEnterix Surgical's common stock held by non-accredited investors. The shares held by non-accredited investors of TransEnterix Surgical were instead converted into the right to receive cash in the amount of \$1.08 per share of SafeStitch's common stock. This cash-out price of \$1.08 per share, without interest, was the volume-weighted average price of a share of SafeStitch common stock on the OTC Bulletin Board, or OTCBB, for the 60-trading day period that ended on August 30, 2013, which was one business day prior to the effective date of the merger. Additionally, upon consummation of the merger, SafeStitch assumed all of the outstanding TransEnterix Surgical stock options and warrants. The same exchange ratio of 1.1533 was applied to the assumption of such outstanding stock options and warrants, and impacted the number of shares and the exercise price of such stock options and warrants.

All references to share amounts in this prospectus have been retroactively adjusted to reflect the impact of the exchange ratio of 1.1533 per share. The exchange ratio and the cash-out price have not been adjusted to reflect the reverse stock split.

The Private Financing

On September 3, 2013, we consummated a private placement transaction with certain of our investors who were accredited investors. We sold shares of our Series B Convertible Preferred Stock to provide funding to support our operations following the merger. Pursuant to a securities purchase agreement dated September 3, 2013, an aggregate of 7,544,704.4 shares of our Series B Preferred Stock were sold in the private placement for a purchase price of \$4.00 per share of Series B Preferred Stock. The purchase price was paid in cash, cancellation of indebtedness of TransEnterix Surgical or a combination of cash and cancellation of indebtedness. Each share of Series B Preferred Stock was convertible into two (2) shares of our common stock. In accordance with the securities purchase agreement, we sold an additional 25,000 shares of Series B Preferred Stock on September 17, 2013. Proceeds from the sale of the Series B Preferred Stock shares, net of issuance costs, were \$28.2 million.

On December 6, 2013, we filed an Amended and Restated Certificate of Incorporation to change our name to TransEnterix, Inc. and to increase the authorized shares of our common stock from 225,000,000 to 750,000,000. In accordance with the Certificate of Designation that defines the terms of the Series B Preferred Stock, upon such filing each outstanding share of Series B Preferred Stock was automatically converted into two

(2) shares of our common stock. An aggregate of 15,139,409 shares of common stock were issued in the conversion of the Series B Preferred Stock on December 6, 2013.

In connection with the closing of the private placement transaction, we entered into a registration rights agreement with the investors participating in the private placement. Such investors are also parties to Voting and Lock-up Agreements with us, pursuant to which they agreed to lock up the securities acquired in the private placement over a two year period. Fifty percent of the securities subject to the lock-ups held by the investors were released from those restrictions on September 3, 2014. The selling stockholders listed in this prospectus are some of the holders of such registration rights and we are registering some of the shares held by them in this registration statement. See “Selling Stockholders.”

Company Information

We were organized as a Delaware corporation on August 19, 1988. Our principal executive offices are located at 635 Davis Drive, Suite 300, Morrisville, NC 27560. Our phone number is (919) 765-8400 and our Internet address is www.transenterix.com. In December 2013, we changed our name to TransEnterix, Inc. from SafeStitch Medical, Inc. The information on our website or any other website is not incorporated by reference in this prospectus and does not constitute a part of this prospectus.

ABOUT THIS PROSPECTUS

This prospectus is part of a “shelf” registration statement that we filed with the U.S. Securities and Exchange Commission, or SEC. By using a shelf registration statement, we may, from time to time, issue any combination of the securities described in this prospectus in one or more offerings up to an aggregate maximum offering price of \$100,000,000, and the selling stockholders identified herein may offer and sell up to an aggregate of 19,516,706 shares of our common stock in one or more offerings. Each time we sell any of our securities, we will provide a prospectus supplement that will contain more specific information about the offering and the terms of the securities being sold. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus or the documents incorporated by reference.

This prospectus provides you with a general description of the Company and our securities. For further information about our business and our securities, you should refer to the registration statement and the reports incorporated by reference in this prospectus, as described in “**Where You Can Find More Information.**”

You should rely only on the information contained in this prospectus and in any prospectus supplement (including in any documents incorporated by reference herein or therein). We have not authorized anyone to provide you with any different information. We are offering to sell our securities, and seeking offers to buy, only in jurisdictions where offers and sales are permitted.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements, other than statements of historical fact, included or incorporated in this report regarding our strategy, future operations, collaborations, intellectual property, cash resources, financial position, future revenues, projected costs, prospects, plans, and objectives of management are forward-looking statements. The words “believes,” “anticipates,” “estimates,” “plans,” “expects,” “intends,” “may,” “could,” “should,” “potential,” “likely,” “projects,” “continue,” “will,” and “would” and similar expressions are

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intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. There are a number of important factors that could cause our actual results to differ materially from those indicated or implied by forward-looking statements. These important factors include those set forth below under the heading “Risk Factors.” These factors and the other cautionary statements made in this prospectus should be read as being applicable to all related forward-looking statements whenever they appear in this prospectus. In addition, any forward-looking statements represent our estimates only as of the date that this prospectus is filed with the SEC, and should not be relied upon as representing our estimates as of any subsequent date. We do not assume any obligation to update any forward-looking statements. We disclaim any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

RISK FACTORS

Investing in our securities involves substantial risks. In addition to other information contained in this prospectus and any accompanying prospectus supplement, before investing in our securities, you should carefully consider the risks described under the heading “Risk Factors” in our most recent Annual Report on Form 10-K, as it may be amended, and subsequent Quarterly Reports on Form 10-Q, and in any other documents incorporated by reference into this prospectus, as updated by our future filings. These risks are not the only ones faced by us. Without limitation, you should carefully consider the risks noted under the caption “Special Note Regarding Forward-Looking Statements” in this prospectus. Additional risks not known or that are deemed immaterial could also materially and adversely affect our financial condition, results of operations, our products, business and prospects. Any of these risks might cause you to lose all or a part of your investment.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus together with our existing cash resources, for working capital and other general corporate purposes. We may also use a portion of the net proceeds that we receive to acquire or invest in complementary businesses, products, services, technologies, or other assets. At this time, we have not determined the specific uses of any offering proceeds, or the amounts we plan to spend on any particular use or the timing of such expenditures, which may vary significantly depending on various factors such as our research and development activities, regulatory approvals, competition, marketing and sales, and the market acceptance of any products introduced by us or our partners. Pending application of the net proceeds from any particular offering, we intend to invest such proceeds in short-term, interest-bearing, investment-grade securities. We will not receive any proceeds from the sale of common stock by the selling stockholders.

Each time we issue securities, we will provide a prospectus supplement that will contain information about how we intend to use the proceeds from each such offering.

We cannot guarantee that we will receive any proceeds in connection with any offering hereunder because we may choose not to issue any of the securities covered by this prospectus.

SELLING STOCKHOLDERS

As described in the Prospectus Summary, the selling stockholders acquired shares of our common stock in the September 2013 private placement financing that occurred at the time of the merger. They are also parties to the registration rights agreement we entered into with the private placement investors in September 2013. We are registering these shares in accordance with the exercise of their registration rights.

The following table sets forth information as of October 24, 2014 and includes the number of shares of our common stock beneficially owned by the selling stockholders prior to the offering, the number of shares of common stock offered by the selling stockholders, and the number of shares of common stock that will be owned by the selling stockholders upon completion of the offering or offerings pursuant to this prospectus, assuming the selling stockholders sell all of the shares of common stock offered hereby. Only those selling stockholders listed below or their transferees, pledgees, donees, assignees, distributees, successors and others who later come to hold any of the selling stockholders' interest may offer and sell the common stock pursuant to this prospectus and any accompanying prospectus supplement. The selling stockholders may offer the shares listed on the table below for sale pursuant to this prospectus and any accompanying prospectus supplement from time to time. Accordingly, no estimate can be given as to the shares of common stock that the selling stockholders will hold upon consummation of any such sales. Beneficial ownership is determined in accordance with the rules of the SEC. There are no material relationships between the selling stockholders and us other than as disclosed below.

Name of Selling Stockholder	Beneficial Ownership Prior to this Offering		Shares Being Offered	Beneficial Ownership After this Offering	
	Number	Percent		Number	Percent
Aisling Capital III, LP(1)	8,335,819	13.2%	3,649,026	4,686,793	7.4%
Yehuda Ben-Horin and Aviva Ben-Horin JT TEN	8,600	*%	4,300	4,300	*%
Chung Chia Company Limited	1,438,280	2.3%	774,140	664,140	1.1%
Frost Gamma Investments Trust(2)	4,108,469	6.5%	2,190,235	1,918,234	3.0%
Jane H. Hsiao(3)	3,162,536	5.0%	1,838,768	1,323,768	2.1%
Hsu Gamma Investments LP (3)	1,257,694	2.0%	628,847	628,847	1.0%
Intersouth Partners VII, LP	3,938,981	6.2%	1,761,599	2,177,382	3.4%
KFBSF Private Equity Fund I, LP	153,403	*%	76,702	76,701	*%
Kwang Shun Company Limited	1,460,000	2.3%	760,000	700,000	1.1%
Joseph Levy Revocable Trust	57,500	*%	28,750	28,750	*%
Levy Family Trust FBO Shana Levy	10,000	*	5,000	5,000	*
Levy Family Trust FBO Sion Levy	10,000	*	5,000	5,000	*
Jacqueline Simkin Revocable Trust	163,953	*%	81,977	81,976	*%
Joseph P. Slattery(4)	83,666	*%	25,000	58,666	*%
StepStone-SYN Investments L.L.L.P.	3,434,381	5.4%	1,717,191	1,717,190	2.7%
Stepstone Pioneer Capital II, LP	29,524	*%	14,762	14,762	*%
Stepstone Pioneer Capital Buyout Fund II, LP	16,607	*%	8,304	8,303	*%
SV Life Sciences Fund IV, L.P.(5)	7,338,352	11.6%	3,304,528	4,033,824	6.4%
SV Life Sciences Fund IV Strategic Partners, L.P.(5)	208,340	*%	93,818	114,522	*%
Synergy Life Science Partners, L.P.(6)	5,318,969	8.4%	2,548,759	2,770,210	4.4%

* Holds less than one percent (1%).

- (1) These shares of common stock are owned directly by Aisling Capital III, L.P., or Aisling, and held indirectly by Aisling Capital Partners III, LP, or Aisling GP, as general partner of Aisling, Aisling Capital Partners III LLC, or Aisling Partners, as general partner of Aisling GP, and each of the individual managing members of Aisling Partners. The individual managing members, collectively, the Managers of Aisling Partners are Dennis Purcell, Dr. Andrew Schiff and Steve Elms. Aisling GP, Aisling Partners and the Managers share voting and dispositive power over the shares directly held by Aisling. Each of Aisling GP, Aisling Partners and the Managers may be deemed to be the beneficial owner of the securities listed above

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only to the extent of its pecuniary interest therein. The above information shall not be deemed an admission that any of Aisling GP, Aisling Partners or any of the Managers is the beneficial owner of any securities reported herein in excess of such amount.

- (2) Dr. Phillip Frost, the trustee and control person of Frost Gamma Investments Trust, was a director of TransEnterix from September 2013 until June 2014.
- (3) Jane Hsiao is a director of TransEnterix. Dr. Hsiao is the general partner of Hsu Gamma Investments Trust. The shares beneficially owned prior to this offering does not include warrants to purchase an aggregate of 400,000 shares of common stock or options to purchase an aggregate of 140,000 shares of common stock which are held by Dr. Hsiao.
- (4) Joseph P. Slattery is Executive Vice President and Chief Financial Officer of TransEnterix. The shares beneficially owned prior to this offering does not include restricted stock units to acquire an aggregate of 133,334 shares of common stock or options to purchase an aggregate of 565,900 shares of common stock which are held by Mr. Slattery.
- (5) These shares of common stock are owned directly by SV Life Sciences Fund IV, L.P., or SVLSF IV LP and SV Life Sciences Fund IV Strategic Partners, L.P., or SVLSF IV SPP respectively. SV Life Sciences Fund IV (GP), LP, or SVLSF IV GP, is the general partner of SVLSF IV LP and SVLSF IV SPP. The general partner of SVLSF IV GP is SVLSF IV, LLC. The members of the investment committee of SVLSF IV, LLC are Kate Bingham, James Garvey, Eugene D. Hill, III, David Milne and Michael Ross. SVLSF IV, LLC and each of these individuals may be deemed to share voting, dispositive and investment power over the shares held of record by SVLSF IV LP and SVLSF IV SPP. David Milne, a member of the SVLSF IV, LLC investment committee, is also a member of our board of directors. Paul LaViolette, a member of our board of directors, is also a member of SVLSF IV GP. Each of the individuals and entities listed above expressly disclaims beneficial ownership of the securities listed above except to the extent of any pecuniary interest therein.
- (6) William N. Starling, Jr., a director of TransEnterix, is a managing director of Synergy Life Science Partners, L.P.

PLAN OF DISTRIBUTION

Primary Offerings by the Company

We may sell the securities being offered hereby from time to time in one or more of the following ways:

- through one or more underwriters;
- through dealers, who may act as agents or principal (including a block trade in which a broker or dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction);
- directly to one or more purchasers;
- through agents;
- through registered direct offerings;
- as part of a collaboration with a third party;
- through “at the market” offerings, within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market on an exchange or otherwise;
- in privately negotiated transactions; and
- in any combination of these methods of sale.

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We will set forth in a prospectus supplement the terms of the offering of securities, including:

- the name or names of any agents, underwriters or dealers;
- the terms of the securities being offered, including the purchase price and the proceeds we will receive from the sale;
- any underwriting discounts and commissions or agency fees and other items constituting underwriters' or agents' compensation;
- any over-allotment options under which underwriters may purchase additional securities from us; and
- any discounts or concessions allowed or reallocated or paid to dealers.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to the prevailing market prices, or at negotiated prices.

Underwriters, dealers, agents and others that participate in the distribution of the securities may be underwriters as defined in the Securities Act and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act. In no event will the total amount of cash compensation paid to underwriters, placement agents, dealers or brokers exceed 10% of the gross proceeds of the offering. We will identify in the applicable prospectus supplement any underwriters, dealers, agents and others and will describe their compensation. We may have agreements with underwriters, dealers, agents and others to indemnify them against specified civil liabilities, including liabilities under the Securities Act. Underwriters, dealers, agents and others may engage in transactions with or perform services for us in the ordinary course of their businesses.

If required under applicable state securities laws, we will sell the securities only through registered or licensed brokers or dealers. In addition, in some states, we may not sell securities unless they have been registered or qualified for sale in the applicable state or unless we have complied with an exemption from any registration or qualification requirements.

Agents

We may designate agents who agree to solicit purchases for the period of their appointment or to sell securities on a continuing basis. Unless the prospectus supplement provides otherwise, agents will act on a best efforts basis for the period of their appointment. Agents may receive compensation in the form of commissions, discounts or concessions from us. Agents may also receive compensation from the purchasers of the securities for whom they sell as principals. Each particular agent will receive compensation in amounts negotiated in connection with the sale, which might be in excess of customary commissions.

Underwriters

If we use underwriters for a sale of securities, the underwriters will acquire the securities for their own account. The underwriters may resell the securities in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. Unless the prospectus supplement provides otherwise, underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. We may change from time to time any initial public offering price and any discounts or concessions the underwriters allow or reallocate or pay to dealers. We may use underwriters with whom we have a material relationship, and we may offer the securities to the public through an underwriting syndicate or through a single underwriter. We will describe in the prospectus supplement naming the underwriter the nature of any such relationship and underwriting arrangement.

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Dealers

We also may sell securities to a dealer as principal. If we sell our securities to a dealer as a principal, then the dealer may resell those securities to the public at varying prices to be determined by such dealer at the time of resale. The name of the dealer and the terms of the transactions will be set forth in the applicable prospectus supplement.

Direct Sales and Institutional Purchases

We may also sell securities directly to one or more purchasers, in which case underwriters or agents would not be involved in the transaction.

Further, we may authorize agents, underwriters or dealers to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in an applicable prospectus supplement.

Stabilization Activities

Any underwriter may engage in over-allotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act.

Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Such activities may cause the price of the securities to be higher than they would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. These transactions may be effected on the NYSE MKT or otherwise.

Passive Market Making

Any underwriters who are qualified market makers on the NYSE MKT may engage in passive market making transactions on the NYSE MKT in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

Costs

We will bear all costs, expenses and fees in connection with the registration of the securities, as well as the expense of all commissions and discounts, if any, attributable to sales of the securities by us.

Offerings by the Selling Stockholders

The selling stockholders and any transferees, pledgees, donees, assignees, distributees or other successors in interest to a selling stockholder may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of our common stock covered by this prospectus on the NYSE MKT or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed

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prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. A selling stockholder may use any one or more of the following methods when disposing of shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law (including underwritten transactions).

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers, underwriters and agents engaged by the selling stockholders may arrange for other brokers dealers, underwriters or agents to participate in sales. Broker-dealers, underwriters or agents may receive commissions, discounts or concessions from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA rules.

In connection with the sale of the common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of the common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one (1) or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers, underwriters or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers, underwriters or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

All costs and expenses incurred in connection with the registration under the Securities Act of the offering made hereby will be paid by us, other than any brokerage fees and commissions, fees and disbursements of legal counsel for the selling stockholders and stock transfer and other taxes attributable to the sale of the shares, which will be paid by the selling stockholders.

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In connection with the Merger, each of the selling stockholders named in this prospectus entered into a lock-up agreement, pursuant to which such selling stockholder has agreed not to sell shares of our common stock for a fixed period of time following the closing of the Merger. The lock-up agreement prohibited all sales of securities by the selling stockholders prior to September 3, 2014, after which the selling stockholders are entitled to sell up to 50% of the securities subject to the lock-up agreement. Beginning on March 3, 2015 the selling stockholders are entitled to sell up to 75% of the securities subject to the lock-up agreement and the lock-up agreement terminates on September 3, 2015 at which point all of the securities subject to the lock-up agreement will be eligible for sale. None of the shares of common stock to be resold by the selling stockholders pursuant to this prospectus remain subject to the restriction on sale contained in the lock-up agreement.

Because selling stockholders may be deemed to be “underwriters” within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus.

To the extent required, the shares of our common stock to be sold; the names of the selling stockholders; the respective purchase prices and public offering prices; the names of any agents, dealers or underwriters; and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 750,000,000 shares of common stock, par value \$0.001 per share, and 25,000,000 shares of preferred stock, par value \$0.01 per share.

Common Stock

Of the authorized common stock, as of September 30, 2014, there are 63,096,816 shares outstanding and there are 7,452,976 shares of our common stock reserved for the exercise of outstanding stock options, warrants and restricted stock units. There were approximately 270 record holders as of September 30, 2014. Subject to the prior rights of the holders of any shares of preferred stock which may be issued in the future, the holders of our common stock are entitled to receive dividends from our funds legally available therefor when, as and if declared by our Board of Directors, and are entitled to share ratably in all of our assets available for distribution to holders of our common stock upon the liquidation, dissolution or winding-up of our affairs, subject to the liquidation preference, if any, of any then outstanding shares of preferred stock. Holders of our common stock do not have any preemptive, subscription, redemption or conversion rights. Holders of our common stock are entitled to one vote per share on all matters which they are entitled to vote upon at meetings of stockholders or upon actions

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taken by written consent pursuant to Delaware corporate law. The holders of our common stock do not have cumulative voting rights, which mean that the holders of a plurality of the outstanding shares can elect all of our directors. All of the shares of our common stock currently issued and outstanding are fully-paid and nonassessable. No dividends have been paid to holders of our common stock since our incorporation, and no cash dividends are anticipated to be declared or paid in the reasonably foreseeable future.

Transfer Agent.

The transfer agent for our common stock is Continental Stock & Transfer Company.

Listing.

The shares of our common stock are currently listed on the NYSE MKT under the symbol “TRXC.”

Preferred Stock

Our Board has the authority, without further action by the holders of the outstanding common stock, to issue preferred stock from time to time in one or more classes or series, to fix the number of shares constituting any class or series and the stated value thereof, if different from the par value, as to fix the terms of any such series or class, including dividend rights, dividend rates, conversion or exchange rights, voting rights, rights and terms of redemption (including sinking fund provisions), the redemption price and the liquidation preference of such class or series.

Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation, our By-Laws and Delaware Law

Delaware Statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to such date, our board of directors approves either the business combination or the transaction that resulted in the stockholder’s becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owns at least 85% of our outstanding voting stock, excluding shares held by directors, officers and certain employee stock plans; or
- on or after the consummation date, the business combination is approved by our board of directors and by the affirmative vote at an annual or special meeting of stockholders holding at least two-thirds of our outstanding voting stock that is not owned by the interested stockholder.

For purposes of Section 203, a “business combination” includes, among other things, a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and an “interested stockholder” is generally a person who, together with affiliates and associates of such person:

- owns 15% or more of outstanding voting stock; or
- is an affiliate or associate of ours and was the owner of 15% or more of our outstanding voting stock at any time within the prior three years.

Certificate of Incorporation and Bylaw Provisions

Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that, among others, could have the effect of delaying, deferring or discouraging potential acquisition proposals

and could delay or prevent a change of control of us. The provisions in our certificate of incorporation and bylaws that may have such effect include:

- Preferred Stock. As noted above, our board of directors, without stockholder approval, has the authority under our certificate of incorporation to issue preferred stock with rights superior to the rights of the holders of common stock. As a result, we could issue preferred stock quickly and easily, which could adversely affect the rights of holders of our common stock and could be issued with terms calculated to delay or prevent a change of control or make removal of management more difficult.
- Stockholder Meetings. Under our certificate of incorporation, as amended, and bylaws, special meetings of our stockholders may be called only by the vote of a majority of the entire Board of Directors or the chairman of the Board of Directors. Our stockholders may not call a special meeting of the stockholders.
- Requirements for Advance Notification of Stockholder Nominations and Proposals. Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our Board of Directors or a committee thereof.

DESCRIPTION OF DEBT SECURITIES

General

The debt securities that we may issue will constitute debentures, notes, bonds or other evidences of indebtedness of the Company, to be issued in one or more series. The particular terms of any series of debt securities we offer, including the extent to which the general terms set forth below may be applicable to a particular series, will be described in a prospectus supplement relating to such series.

Debt securities that we may issue will be issued under an indenture between us and a trustee qualified to act as such under the Trust Indenture Act of 1939. When we refer to the “indenture” in this prospectus, we are referring to the indenture under which debt securities are issued as supplemented by any supplemental indenture applicable to such debt securities. We will provide the name of the trustee in any prospectus supplement related to the issuance of debt securities, and we will also provide certain other information related to the trustee, including describing any relationship we have with the trustee, in such prospectus supplement.

Unless otherwise specified in a prospectus supplement, the debt securities will be direct secured or unsecured obligations of the Company. The senior debt securities will rank equally with any of our other unsecured senior and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment to any senior indebtedness.

We may issue debt securities from time to time in one or more series, in each case with the same or various maturities, at par or at a discount. Unless indicated in a prospectus supplement, we may issue additional debt securities of a particular series without the consent of the holders of the debt securities of such series outstanding at the time of the issuance. Any such additional debt securities, together with all other outstanding debt securities of that series, will constitute a single series of debt securities under the applicable indenture and will be equal in ranking.

The following statements relating to the debt securities and the indenture are summaries and do not purport to be complete, and are subject in their entirety to the detailed provisions of the indenture.

Information to be provided in a Prospectus Supplement

The prospectus supplement will set forth the following terms of the debt securities in respect of which this prospectus is delivered:

- the title and denominations of the debt securities of the series;
- any limit on the aggregate principal amount of the debt securities of the series;
- the date or dates on which the principal and premium, if any, with respect to the debt securities of the series are payable or the method of determination thereof;
- the rate or rates, which may be fixed or variable, at which the debt securities of the series shall bear interest, if any, or the method of calculating and/or resetting such rate or rates of interest;
- the dates from which such interest shall accrue or the method by which such dates shall be determined and the duration of the extensions and the basis upon which interest shall be calculated;
- the interest payment dates for the series of debt securities or the method by which such dates will be determined, the terms of any deferral of interest and any right of ours to extend the interest payments periods;
- the terms and conditions upon which debt securities of the series may be redeemed, in whole or in part, at our option or otherwise;
- our obligation, if any, to redeem, purchase, or repay debt securities of the series pursuant to any sinking fund or other specified event or at the option of the holders and the terms of any such redemption, purchase, or repayment;
- the terms, if any, upon which the debt securities of the series may be convertible into or exchanged for preferred stock or common stock, including, among other things, the initial conversion or exchange price or rate and the conversion or exchange period;
- if the amount of principal, premium, if any, or interest with respect to the debt securities of the series may be determined with reference to an index or formula, the manner in which such amounts will be determined;
- if any payments on the debt securities of the series are to be made in a currency or currencies (or by reference to an index or formula) other than that in which such securities are denominated or designated to be payable, the currency or currencies (or index or formula) in which such payments are to be made and the terms and conditions of such payments;
- any changes or additions to the provisions of the indenture dealing with defeasance, including any additional covenants that may be subject to our covenant defeasance option;
- the currency or currencies in which payment of the principal and premium, if any, and interest with respect to debt securities of the series will be payable, or in which the debt securities of the series shall be denominated, and the particular provisions applicable thereto in accordance with the indenture;
- the portion of the principal amount of debt securities of the series which will be payable upon declaration of acceleration or provable in bankruptcy or the method by which such portion or amount shall be determined;
- whether the debt securities of the series will be secured and, if so, on what terms;
- any events of default with respect to the debt securities of the series;
- the identity of any trustees, authenticating or paying agents, transfer agents or registrars;
- the applicability of, and any addition to or change in, the covenants currently set forth in the indenture;

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- the subordination, ranking or priority, if any, of the debt securities of the series and terms of the subordination;
- any other terms of the debt securities of the series which are not prohibited by the indenture; and
- whether securities of the series shall be issuable as registered securities or bearer securities (with or without interest coupons), and any restrictions applicable to the offering, sale or delivery of such bearer securities and the terms upon which such bearer securities of a series may be exchanged for registered securities, and vice versa.

Interest Rate

Debt securities that bear interest will do so at a fixed rate or a floating rate. We may sell, at a discount below the stated principal amount, any debt securities which bear no interest or which bear interest at a rate that at the time of issuance is below the prevailing market rate. The relevant prospectus supplement will describe the special United States federal income tax considerations applicable to any discounted debt securities and any debt securities issued at par which are treated as having been issued at a discount for United States federal income tax purposes.

Transfer and Exchange

We may issue debt securities that would be represented by either:

“book-entry securities,” which means that there will be one or more global securities registered in the name of The Depository Trust Company, as depository, or a nominee of the depository; or

“certificated securities,” which means that they will be represented by a certificate issued in definitive registered form.

We would specify in the prospectus supplement applicable to a particular offering whether the debt securities offered will be book-entry or certificated securities. Except as set forth under **“Global Debt Securities and Book-Entry System”** below, book-entry debt securities would not be issuable in certificated form.

Certificated Debt Securities

If you hold certificated debt securities that have been offered by this prospectus, you may transfer or exchange them at the trustee’s office or at the paying agency in accordance with the terms of the indenture. You would not be charged a service charge for any transfer or exchange of certificated debt securities, but may be required to pay an amount sufficient to cover any tax or other governmental charge payable in connection with the transfer or exchange.

The transfer of certificated debt securities and of the right to receive the principal of, premium and/or interest, if any, on your certificated debt securities can occur only by surrendering the certificate representing your certificated debt securities and having us or the trustee issue a new certificate to the new holder.

Global Debt Securities and Book-Entry System

If we decided to issue debt securities in the form of one or more global securities, then we would register the global securities in the name of the depository for the global securities or in the nominee of the depository, and the global securities would be delivered by the trustee to the depository for credit to the accounts of the holders of beneficial interest in the debt securities. Each global security would:

- be registered in the name of a depository, or its nominee, that we would identify in a prospectus supplement;
- be deposited with the depository or nominee or custodian; and
- bear any required legends.

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No global security may be exchanged in whole or in part for debt securities registered in the name of any person other than the depository or any nominee unless:

- the depository has notified us that it is unwilling or unable to continue as depository or has ceased to be qualified to act as depository;
- an event of default has occurred and is continuing with respect to the debt securities of the applicable series; or
- any other circumstance described in a prospectus supplement has occurred permitting or requiring the issuance of any such security.

As long as the depository, or its nominee, is the registered owner of a global security, the depository or nominee would be considered the sole owner and holder of the debt securities represented by the global security for all purposes under the indentures. Except in the above limited circumstances, owners of beneficial interests in a global security would not be:

- entitled to have the debt securities registered in their names;
- entitled to physical delivery of certificated debt securities; or
- considered to be holders of those debt securities under the indenture.

Payments on a global security would be made to the depository or its nominee as the holder of the global security. Some jurisdictions have laws that require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to transfer beneficial interests in a global security.

Institutions that have accounts with the depository or its nominee are referred to as “participants.” Ownership of beneficial interests in a global security would be limited to participants and to persons that may hold beneficial interests through participants. The depository would credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants.

Ownership of beneficial interests in a global security would be shown on and effected through records maintained by the depository, with respect to participants’ interests, or any participant, with respect to interests of persons held by participants on their behalf.

Payments, transfers and exchanges relating to beneficial interests in a global security would be subject to policies and procedures of the depository. The depository policies and procedures may change from time to time. Neither any trustee nor we would have any responsibility or liability for the depository’s or any participant’s records with respect to beneficial interests in a global security.

The prospectus supplement would describe the specific terms of the depository arrangement for debt securities of a series that are issued in global form. The Company and its agents, the trustee, and any of its agents would not have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global debt security or for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

Conversion or Exchange Rights

Debt securities offered hereby may be convertible into or exchangeable for shares of our common or preferred stock. The terms and conditions of such conversion or exchange will be set forth in the applicable prospectus supplement. Such terms may include, among others, the following:

- the conversion or exchange price;
- the conversion or exchange period;

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- provisions regarding our ability or that of the holder to convert or exchange the debt securities;
- events requiring adjustment to the conversion or exchange price; and
- provisions affecting conversion or exchange in the event of our redemption of such debt securities.

Covenants

Unless otherwise indicated in a prospectus supplement, the debt securities would not have the benefit of any covenants that limit or restrict our business or operations, the pledging of our assets or the incurrence by us of indebtedness. We would describe in the applicable prospectus supplement any material covenants of a series of debt securities.

Concerning the Trustee

We would identify the trustee with respect to any series of debt securities in the prospectus supplement relating to the debt securities. You should note that if the trustee becomes a creditor of the Company, the indenture and the Trust Indenture Act of 1939 limit the rights of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of certain claims, as security or otherwise. The trustee and its affiliates may engage in, and would be permitted to continue to engage in, other transactions with us and our affiliates. If, however, the trustee acquires any “conflicting interest” within the meaning of the Trust Indenture Act of 1939, it must eliminate the conflict or resign.

The holders of a majority in principal amount of the then outstanding debt securities of any series may direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee. If an event of default occurs and is continuing, the trustee, in the exercise of its rights and powers, must use the degree of care and skill of a prudent person in the conduct of his or her own affairs. Subject to this provision, the trustee would be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of the debt securities, unless they have offered to the trustee reasonable indemnity or security.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase preferred stock or common stock. We may offer warrants separately or together with one or more additional warrants, debt securities, shares of preferred stock or common stock, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the warrants’ expiration date. We may issue the warrants under warrant agreements to be entered into between us and a bank or trust company, as warrant agent, all as described in the prospectus supplement. If we issue the warrants under warrant agreements, the warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

We will describe the particular terms of any warrants that we offer in the prospectus supplement relating to those warrants. Those terms may include the following:

- the specific designation and aggregate number of warrants, and the price at which we will issue the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the date on which the right to exercise the warrants will begin and the date on which the right will expire or, if the warrants are not continuously exercisable throughout that period, the specific date or dates on which they are exercisable;

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- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms;
- any applicable material United States federal income tax considerations;
- the identity of the warrant agent, if any, for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the designation, aggregate principal amount, currency, denomination and terms of any debt securities that may be purchased upon exercise of the warrants;
- the designation, amount, currency, denominations and terms of any preferred stock or common stock purchasable upon exercise of the warrants;
- if applicable, the designation and terms of the debt securities, preferred stock or common stock with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which the warrants and the related debt securities, preferred stock or common stock will be separately transferable;
- the principal amount of debt securities or the number of shares of preferred stock or common stock purchasable upon exercise of any warrant and the price at which those shares may be purchased;
- provisions for changes to or adjustments in the exercise price;
- if applicable, the minimum or maximum number of warrants that may be exercised at any one time;
- information with respect to any book-entry procedures;
- any antidilution provision of the warrants;
- any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Pursuant to the Amended and Restated Loan and Security Agreement, dated September 26, 2014, among the Company and its operating subsidiaries, including TransEnterix Surgical, and Oxford Finance LLC and Silicon Valley Bank, we issued warrants to purchase an aggregate of 38,324 shares of common stock to the lenders. These warrants were in addition to warrants to purchase an aggregate of 279,587 shares of common stock issued to the lenders under the original loan and security agreement, as amended. Pursuant to a stock purchase agreement dated March 22, 2013 among SafeStitch and the investors executing such agreement, SafeStitch issued warrants to acquire 1,209,600 shares of common stock. As of September 30, 2014, warrants to acquire 1,135,600 shares of our common stock remain outstanding.

DESCRIPTION OF UNITS

We may issue units consisting of one or more of the other securities that may be offered under this prospectus, in any combination. These units may be issuable as, and for a specified period of time may be transferable only as, a single security, rather than as the separate constituent securities comprising such units. The statements made in this section relating to the units are summaries only and are not complete. When we issue units, we will provide the specific terms of the units in a prospectus supplement. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement.

RATIO OF EARNINGS TO FIXED CHARGES

If we offer debt securities and/or shares of preferred stock under this prospectus, then we will, if required at that time, provide a ratio of earnings to fixed charges and/or ratio of combined fixed charges and preference dividends to earnings, respectively, in the applicable prospectus supplement for such offering.

LEGAL MATTERS

Certain legal matters with respect to the securities offered hereby have been passed upon by Ballard Spahr LLP.

EXPERTS

The consolidated financial statements as of December 31, 2013 and 2012 and for each of the two years in the period ended December 31, 2013 incorporated by reference in this Prospectus have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, (the report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern) incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" in this prospectus the information in other documents that we file with it, which means that we can disclose important information to you by referring you to those documents containing such information. This prospectus is part of a registration statement we filed with the SEC. You should rely on the information incorporated by reference in this prospectus and the registration statement. The information incorporated by reference is considered to be part of this prospectus and information we file later with the SEC will automatically update and supersede this information and information contained in documents filed earlier with the SEC. We incorporate by reference the documents listed below and any future filings made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of the offering; provided, that we are not incorporating by reference any documents or information deemed to have been furnished and not filed in accordance with SEC rules. The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the year ended December 31, 2013, filed on March 5, 2014, our Annual Report on Form 10-K/A for the year ended December 31, 2013, filed on March 14, 2014, our Annual Report on Form 10-K/A Amendment No. 2 for the year ended December 31, 2013, filed on March 31, 2014 and our Annual Report on Form 10-K/A Amendment No. 3 for the year ended December 31, 2013, filed on April 2, 2014;
- our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2014, filed on May 8, 2014, for the quarter ended June 30, 2014, filed on August 6, 2014; and for the quarter ended September 30, 2014, filed on November 7, 2014;
- our Current Reports on Form 8-K filed on February 19, 2014 (Items 5.02, 5.05, and 5.07), filed on March 31, 2014 (Items 8.01 and 9.01), filed on April 1, 2014 (Items 5.03 and 9.01), filed on April 1, 2014 (Items 8.01 and 9.01), filed on April 2, 2014 (Items 8.01 and 9.01), filed on April 2, 2014 (Items 8.01 and 9.01), filed on April 14, 2014 (Items 8.01), filed on April 15, 2014 (Items 1.01 and 9.01), filed on May 5, 2014 (Items 8.01 and 9.01), filed on June 3, 2014 (Items 5.02 and 9.01), filed on June 24, 2014 (Items 5.07), filed on July 18, 2014 (Items 1.01 and 9.01), filed on September 30, 2014 (Items 1.01, 2.03, 3.03 and 9.01), filed on November 7, 2014 (Items 5.02 and 9.01), filed on

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December 11, 2014 (Items 5.02 and 9.01), and filed on December 19, 2014 (Items 8.01 and 9.01), and Current Reports on Form 8-K/A filed on April 4, 2014 (Items 5.03 and 9.01), and filed on August 1, 2014 (Item 5.07); and

- The description of our common stock contained in the Registration Statement on Form 8-A filed on April 7, 2014 and any amendments to such Registration Statement filed subsequently thereto, including all amendments or reports filed for the purpose of updating such description.

We will furnish to you, on written or oral request, a copy of any or all of the documents that have been incorporated by reference, including exhibits to these documents. You may request a copy of these filings at no cost by writing or telephoning our Secretary at the following address and telephone number:

TransEnterix, Inc.
Attention: Joshua Weingard, Chief Legal Officer and Secretary
635 Davis Drive, Suite 300
Morrisville, NC 27560
Telephone No.: (919) 765-8400

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act to register our securities being offered in this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all the information set forth in the registration statement or the exhibits and schedules filed thereto. For further information about us and our securities offered by this prospectus, we refer you to the registration statement and the exhibits and schedules filed with the registration statement. Any statement contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement is not necessarily complete and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. You may read and copy any materials we file with the SEC, including the registration statement, at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549, on official business days during the hours of 10:00 a.m. to 3:00 p.m. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is <http://www.sec.gov>. You may also inspect our SEC reports and other information at our website at www.transenterix.com. Information on or accessible through our website is not a part of this prospectus. We are subject to the information reporting requirements of the Exchange Act, and file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information are available for inspection and copying at the public reference room and website of the SEC referred to above.



