UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TRANSENTERIX, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 11-2962080 (I.R.S. Employer Identification Number)

635 Davis Drive, Suite 300 Morrisville, NC 27560 (919) 765-8400 (Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Joseph P. Slattery EVP and Chief Financial Officer 635 Davis Drive, Suite 300 Morrisville, NC 27560 (919) 765-8400 (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

With a copy to:

Mary J. Mullany, Esquire Ballard Spahr LLP 1735 Market Street, 51st Floor Philadelphia, PA 19103 (215) 864-8631 Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a registration statement filed pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \Box

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large Accelerated Filer □ Non-Accelerated Filer □

Accelerated Filer⊠Smaller Reporting Company□

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price Per Security	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common stock, par value \$0.001 per share	—	— (2)	—	—
Preferred stock, par value \$0.01 per share	—	— (2)	—	—
Debt securities	—	— (2)	—	—
Warrants	—	— (2)	—	
Units	—	— (2)	—	—
SUBTOTAL	—	— (2)	\$150,000,000(3)	\$15,105(3)(4)
TOTAL			\$150,000,000(3)	\$15,105(3)(4)

(1) TransEnterix, Inc. is registering an indeterminate number of its securities to be issued and sold from time to time at indeterminate prices. In no event will the aggregate maximum offering price of all securities issued pursuant to this registration statement exceed \$150,000,000, or if any debt securities are issued with original issue discount, such greater amount as will result in an aggregate offering price of \$150,000,000. In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the securities registered hereunder include such indeterminate number of securities as may be issuable with respect to the securities being registered hereunder as a result of stock splits, stock dividends or similar transactions.

- (2) Not specified pursuant to General Instruction II.D. of Form S-3. The proposed maximum offering price per share will be determined from time to time by the Registrant in connection with, and at the time of, the issuance of the securities.
- (3) Estimated solely for the purpose of calculating the amount of the registration fee required pursuant to Rule 457(o) under the Securities Act, which permits the registration fee to be calculated on the basis of the maximum aggregate offering price of all securities listed.
- (4) Previously paid on November 7, 2014. A registration fee of \$20,975 was previously paid with the initial filing of this Registration Statement consisting of a fee of \$11,620 paid for securities to be offered for sale by the Registrant in the aggregate amount of \$100,000,000 and a fee of \$9,355 paid in connection with the registration of 19,516,706 shares of common stock to be offered for resale by selling stockholders. The shares to be offered for resale by selling stockholders are no longer registered on this Registration Statement. Therefore, pursuant to Rule 457(p), the Registrant is offsetting the registration fee due under this Registration Statement for the additional \$50,000,000 of primary securities offered by the Registrant by \$3,485 of the \$9,355.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated March 8, 2016

PROSPECTUS



\$150,000,000 Common Stock Preferred Stock Warrants Debt Securities Units

We are refreshing our existing shelf registration statement initially declared effective on December 19, 2014 so that we may offer and sell from time to time, in one or more offerings, up to \$150,000,000 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. As of the date of this filing, we have sold \$81,200,000 of the securities registered hereunder in public offerings, leaving an aggregate of \$68,800,000 available for future offers and sales of the securities to be offered under this prospectus.

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.

Our common stock is traded on the NYSE MKT under the symbol "TRXC." On March 7, 2016, the closing price of our common stock was \$3.94 per share.

Investing in our securities involves a high degree of risk. See "<u>RISK FACTORS</u>" on page 6.

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

TABLE OF CONTENTS

	Page
PROSPECTUS SUMMARY	1
ABOUT THIS PROSPECTUS	4
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	5
RISK FACTORS	6
<u>USE OF PROCEEDS</u>	6
PLAN OF DISTRIBUTION	6
DESCRIPTION OF CAPITAL STOCK	9
DESCRIPTION OF DEBT SECURITIES	11
DESCRIPTION OF WARRANTS	16
DESCRIPTION OF UNITS	17
RATIO OF EARNINGS TO FIXED CHARGES	18
LEGAL MATTERS	18
<u>EXPERTS</u>	18
INCORPORATION BY REFERENCE	18
WHERE YOU CAN FIND MORE INFORMATION	19

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 6 and our financial statements and the related notes incorporated by reference into this prospectus, before making an investment decision. In this prospectus, we refer to TransEnterix, Inc., a Delaware corporation, as "TransEnterix," the "Company," "we," "us" or "our."

Company Overview

We are a medical device company that is pioneering the use of robotics to improve minimally invasive surgery by addressing the clinical challenges associated with current laparoscopic and robotic options. The Company is focused on the commercialization and further development of the ALF-X® Surgical Robotic System, or the ALF-X System, a multi-port robotic system that brings the advantages of robotic surgery to patients while enabling surgeons with innovative technology, and on the development and commercialization of the SurgiBotTM System, or SurgiBot System, a single-port, robotically enhanced laparoscopic surgical platform. The ALF-X System has been granted a CE Mark in Europe for laparoscopic abdominal and pelvic surgery, as well as limited thoracic operations excluding cardiac and vascular surgery, but is not available for sale in the U.S. The SurgiBot System has been submitted for clearance to the U.S. Food and Drug Administration, or FDA, and is not yet available for sale in any market.

The ALF-X System is a multi-port robotic surgery system which allows multiple robotic arms to control instruments and a camera. The system features advanced technology to enable surgeons with haptic feedback and the ability to move the camera via eye movement. The system replicates laparoscopic motion that is familiar to experienced surgeons, and integrates 3DHD vision technology. The ALF-X System also offers responsible economics to hospitals by offering robotic technology with reusable instruments thereby reducing additional costs per surgery when compared to laparoscopy.

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 high definition, or 3DHD, vision technology. On June 1, 2015, we submitted our 510(k) application to the FDA for clearance of the SurgiBot System which was accepted for review. In August 2015, the FDA requested additional information related to the SurgiBot System 510(k) submission. We responded to that additional information request in February 2016. We anticipate that we will receive FDA clearance for the SurgiBot System by the end of the first quarter of 2016 and thereafter intend to launch sales of the SurgiBot System during the second quarter of 2016.

We believe that future advancements in robotic surgery will leverage three growth drivers: (1) build on the success of laparoscopy while addressing limitations; (2) develop innovative technology that addresses trade-offs; and (3) provide a compelling economic value to hospitals. The ALF-X System and the SurgiBot System are designed to meet those needs, and help expand robotic surgery to more diverse markets and a wide range of patients.

Our strategy is to focus our resources on the commercialization and further development of the ALF-X System and on the development and commercialization of the SurgiBot System.

From our inception, we devoted a substantial percentage of our resources to research and development and start-up activities, consisting primarily of product design and development, clinical studies, manufacturing, recruiting qualified personnel and raising capital.

Since inception, we have been unprofitable. As of December 31, 2015, we had an accumulated deficit of approximately \$182.9 million.

We expect to continue to invest in research and development and related clinical studies, and increase selling, general and administrative expenses as we grow. As a result, we will need to generate significant revenue in order to achieve profitability.

We operate in one business segment.

Recent Events

Acquisition of ALF-X Surgical Robotic System

On September 18, 2015, we entered into a Membership Interest Purchase Agreement, or the Purchase Agreement, with SOFAR S.p.A., or SOFAR, Vulcanos S.r.l., or Vulcanos, as the acquired company, and TransEnterix International, Inc., or TransEnterix International, a wholly owned subsidiary of the Company. The closing of the transactions occurred on September 21, 2015, or the Closing Date, pursuant to which we acquired all of the membership interests of Vulcanos from SOFAR, or the ALF-X Acquisition, and changed the name of Vulcanos to TransEnterix Italia S.r.l, or TransEnterix Italia. The acquisition included all of the assets, employees and contracts related to the advanced robotic system for minimally invasive laparoscopic surgery known as the ALF-X System.

Under the terms of the Purchase Agreement, the consideration consisted of the issuance of 15,543,413 shares of our common stock, or the Securities Consideration, and approximately \$25 million U.S. Dollars and €27.5 million Euro in cash consideration, or the Cash Consideration. The Securities Consideration was issued in full at the closing of the ALF-X Acquisition; the Cash Consideration was or will be paid in four tranches, as follows:

(1) \$25 million of the Cash Consideration was paid at closing;

(2) The second tranche of the Cash Consideration, or the Second Tranche, of \notin 10 million, shall be payable after the achievement of both of the following milestones (i) the earlier of approval from the FDA for the ALF-X System or December 31, 2016, and (ii) the Company having cash on hand of at least \$50 million, or successfully completing a financing, raising at least \$50 million in gross proceeds; with payment of simple interest at a rate of 9.0% per annum between the achievement of the first milestone event and the payment date;

(3) The third tranche of the Cash Consideration, or the Third Tranche, of €15 million shall be payable upon achievement of trailing revenues from sales or services contracts of the ALF-X System of at least €25 million over a calendar quarter; and

(4) The fourth tranche of the Cash Consideration of €2.5 million shall be payable by December 31, 2016 as reimbursement for certain debt payments made by SOFAR under an existing SOFAR loan agreement.

The Third Tranche will be payable even if the Second Tranche is not then payable. In addition, the Second Tranche and Third Tranche payments will be accelerated in the event that (i) the Company or

TransEnterix International is acquired, (ii) the Company significantly reduces or suspends selling efforts of the ALF-X System, or (iii) the Company acquires a business that offers alternative products that are directly competitive with the ALF-X System.

Under the Purchase Agreement, 10% of the Securities Consideration is being held in escrow to support SOFAR's representations and warranties under the Purchase Agreement. The Company and SOFAR also entered into a Security Agreement, which provides that 10% of the membership interests of TransEnterix Italia have a lien placed thereon by and in favor of SOFAR to support the Company's representations and warranties under the Purchase Agreement. The escrow period and security interest period are each twenty-four months after the closing of the ALF-X Acquisition.

The Purchase Agreement contains customary representations and warranties of the parties and the parties have customary indemnification obligations, which are subject to certain limitations described further in the Purchase Agreement.

In connection with the ALF-X Acquisition, we also entered into a Registration Rights Agreement, dated as of September 21, 2015, with SOFAR, pursuant to which we agreed to register the Securities Consideration shares for resale following the end of the lock-up periods described below.

In connection with the ALF-X Acquisition, SOFAR entered into a Lock-Up Agreement with the Company pursuant to which SOFAR agreed, subject to certain exceptions, not to sell, transfer or otherwise convey any of the Securities Consideration for one year following the Closing Date. The Lock-Up Agreement provides that SOFAR may sell, transfer or convey: (i) no more than 50% of the Securities Consideration during the period commencing on the one-year anniversary of the Closing Date and ending on the eighteen-month anniversary of the Closing Date; and (ii) no more than 75% of the Securities Consideration during the period commencing on the eighteen-month anniversary of the Closing Date and ending on the two-year anniversary of the Closing Date. The restrictions on transfer contained in the Lock-Up Agreement cease to apply to the Securities Consideration following the second anniversary of the Closing Date, or earlier upon certain other conditions.

Public Offerings under this Shelf Registration Statement

On February 20, 2015, we entered into a Controlled Equity OfferingSM Sales Agreement, or the 2015 Sales Agreement, with Cantor Fitzgerald & Co., or Cantor, as sales agent, pursuant to which we offered and sold, through Cantor, \$25 million in shares of common stock in an at-the-market offering, or the 2015 ATM Offering. As of February 12, 2016, the 2015 ATM Offering has been fully sold with 7,724,488 shares issued. The common stock was offered and sold pursuant to the shelf registration statement on Form S-3 (File No. 333-199998) of which this prospectus forms a part.

On June 11, 2015, we sold 16,666,667 shares of common stock at a public offering price of \$3.00 per share for aggregate gross proceeds of \$50.0 million in an underwritten firm commitment public offering. Net proceeds after issuance costs were \$46.4 million. We granted the underwriters an option, exercisable for 30 days, to purchase up to an additional 2,500,000 shares of common stock. The common stock was offered and sold pursuant to the shelf registration statement on Form S-3 (File No. 333-199998) of which this prospectus forms a part. The closing of the public offering occurred on June 17, 2015. On July 10, 2015, the underwriters exercised a portion of their option and acquired an additional 2,075,000 shares at the public offering price of \$3.00 per share for aggregate additional gross proceeds of \$6.2 million. Net proceeds after issuance costs were \$5.8 million. The purchase of the option shares closed on July 15, 2015. Total proceeds (including the option) were \$52.2 million, net of issuance costs of \$4.0 million.

2014 Reverse Stock Split

On March 31, 2014, we effectuated a reverse stock split of our issued and outstanding shares of common stock at a ratio of 1 for 5, or the Reverse Stock Split. As a result of the Reverse Stock Split, the Company's issued and outstanding stock decreased from 244,276,923 to 48,855,255 shares of common stock, all with a par value of \$0.001. All information in this prospectus related to common stock, stock options, RSUs, warrants and earnings per share for prior periods has been retroactively adjusted in this prospectus to give effect to the Reverse Stock Split, except for the reference to the Merger Exchange Ratio of 1.1533 described below.

2013 Merger

On September 3, 2013, TransEnterix Surgical, Inc. a Delaware corporation, 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 a result of the Merger, TransEnterix Surgical became a wholly owned subsidiary of SafeStitch.

Pursuant to the merger agreement, each share of TransEnterix Surgical's capital stock issued and outstanding immediately preceding the Merger was converted into the right to receive 1.1533 shares, or the Exchange Ratio, of SafeStitch's common stock, par value \$0.001 per share, other than those shares of TransEnterix Surgical's common stock held by non-accredited investors, which shares were instead converted into the right to receive an amount in cash per share of SafeStitch common stock equal to \$1.08, without interest, which was the volume-weighted average price of a share of SafeStitch common stock on the OTCBB for the 60-trading day period ended on August 30, 2013 (one business day prior to the effective date of the Merger). Additionally, pursuant to the merger agreement, upon consummation of the Merger, SafeStitch assumed all of TransEnterix Surgical's options and warrants issued and outstanding immediately prior to the Merger at the same Exchange Ratio.

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.

As used herein, the terms "Company," "we" or "us" each refers to both the combination of SafeStitch and TransEnterix Surgical after giving effect to the Merger, and the addition of TransEnterix International and TransEnterix Italia after giving effect to the ALF-X Acquisition, unless the context otherwise provides. The term "SafeStitch" refers to the historic business of SafeStitch Medical, Inc. prior to the Merger, and the term "TransEnterix Surgical" refers to the historic business of TransEnterix Surgical, Inc. prior to the Merger.

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, after the date of this prospectus 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 \$68,800,000 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 (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). All statements, other than statements of historical fact, included or incorporated in this prospectus 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 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 referenced 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. 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 fund commercialization activities or 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.

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.

PLAN OF DISTRIBUTION

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.

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 reallowed 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 reallow 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.

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 overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act.

Overallotment 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.

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 March 7, 2016, there were 106,609,302 shares outstanding and as of December 31, 2015, there were 10,149,941 shares of our common stock reserved for the exercise of outstanding stock options, warrants and restricted stock units. There were approximately 248 record holders as of February 29, 2016. 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 vote upon at meetings of stockholders or upon actions 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:

• <u>Preferred Stock</u>. 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.

- <u>Stockholder Meetings</u>. 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.
- <u>Requirements for Advance Notification of Stockholder Nominations and Proposals</u>. 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;
- 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:

(a) "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

(b) "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 depositary, or its nominee, that we would identify in a prospectus supplement;
- be deposited with the depositary or nominee or custodian; and
- bear any required legends.

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

- the depositary has notified us that it is unwilling or unable to continue as depositary or has ceased to be qualified to act as depositary;
- 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 depositary, or its nominee, is the registered owner of a global security, the depositary 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 depositary 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 depositary 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 depositary 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 depositary, 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 depositary. The depositary policies and procedures may change from time to time. Neither any trustee nor we would have any responsibility or liability for the depositary'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;
- 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;
- 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, as amended, among the Company and its U.S.-based 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 on September 26, 2014 and warrants to purchase an additional 112,903 shares of common stock on August 18, 2015 in connection with an amendment to the Loan Agreement. These warrants were in addition to warrants to purchase an aggregate of 279,588 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 February 29, 2016, warrants to acquire 1,426,622 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, 2015 and 2014 and for each of the three years in the period ended December 31, 2015 and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2015 incorporated by reference in this prospectus 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.

The carve-out financial statements of ALF-X System (a carve-out of SOFAR S.p.A.) as of December 31, 2014 and 2013 and for the two years in the period ended December 31, 2014 incorporated by reference in this prospectus have been so incorporated in reliance on the report of BDO S.p.A., an independent auditor, 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, 2015, filed on March 3, 2016;
- our Current Reports on Form 8-K filed on February 9, 2016 (Items 1.01, 8.01 and 9.01), on February 10, 2016 (Items 8.01 and 9.01) and on February 11, 2016 (Items 8.01 and 9.01), and our Current Report on Form 8-K/A filed on December 4, 2015 (Item 9.01); 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 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 are available for inspection and copying at the public reference room and website of the SEC referred to above.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The costs and expenses payable by the Company in connection with the offerings described in this registration statement are as follows:

SEC registration fee	\$15,105.00
Legal fees and expenses	\$40,000.00*
Accounting fees and expenses	\$35,000.00*
Printer costs and expenses	\$ 4,895.00*
Total	\$95,000.00

• Estimated as permitted under Rule 511 of Regulation S-K.

Item 15. Indemnification of Directors and Officers.

The Delaware General Corporation Law (DGCL) and certain provisions of our bylaws under certain circumstances provide for indemnification of our officers, directors and controlling persons against liabilities which they may incur in such capacities. A summary of the circumstances in which such indemnification is provided for is contained herein, but this description is qualified in its entirety by reference to our bylaws.

Section 145 of the DGCL permits a corporation to indemnify any director, officer, employee or agent of the corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reason to believe his or her conduct was unlawful.

A similar standard is applicable in the case of derivative actions (i.e., actions brought by or on behalf of the corporation), except that indemnification only extends to expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of such action, and the statute requires court approval before there can be any indemnification where the person seeking indemnification has been found liable to the corporation. The statute provides that it is not exclusive of other indemnification that may be granted by a corporation's certificate of incorporation, bylaws, disinterested director vote, stockholder vote, agreement or otherwise.

Our bylaws provide for the indemnification described above and requires that any such indemnification only be made by the Company upon a determination that the applicable standard of conduct has been met, which determination shall be made (a) by the Board of Directors, by a majority vote of a quorum consisting of directors who were not parties to such action, suit or proceeding, or (b) if such a quorum is not obtainable, or, even if obtainable, if a quorum of disinterested directors so directs, by independent legal counsel in a written opinion, or (c) by the stockholders.

Our bylaws also authorize the Board of Directors, in its discretion, to pay the expenses of any such action in advance of the final disposition of such action upon a written undertaking by such indemnitee to repay such amounts if it shall ultimately be determined that he or she is not entitled to indemnification under the standard set by the DGCL and our bylaws.

Section 102(b)(7) of the DGCL permits, and the Company's Amended and Restated Certificate of Incorporation provide, that no director shall be personally liable to the Company or its stockholders for monetary damages for such a breach of fiduciary duty as a director, except for liabilities arising:

- from any breach of the director's duty of loyalty to the Company or its stockholders;
- from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the DGCL (unlawful payment of dividend or unlawful stock purchase or redemption); and
- from any transaction from which the director derived an improper personal benefit.

We have entered into an indemnification agreement with each of our directors and executive officers. The indemnification agreements provide indemnification to each director or executive officer (the "Indemnitee") against all expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by the Indemnitee, or on his or her behalf if the Indemnitee is, or is threatened to be made, a party to or participant in any proceeding related to his or her status as a director and/or executive officer of the Company, as long as the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful. For proceedings by or in the right of the Company, indemnification is provided as set forth above; provided, however, if applicable law so provides, no indemnification against such expenses will be made in respect of any claim, issue or matter in such proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

Section 145(g) of the DGCL grants the power to us to purchase and maintain insurance which protects our officers and directors against any liabilities incurred in connection with their service in such a position, and such a policy may be obtained by us.

A stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 16. Exhibits.

The following exhibits are filed as part of, or incorporated by reference into this registration statement:

Exhibit Number	Identification of Exhibit
1.1 +	Form of Underwriting Agreement
4.1	Specimen Certificate for common stock of Registrant (filed as Exhibit 4.1 to the Registrant's Registration Statement on Form S-3, File No. 333-193235, filed with the SEC on January 8, 2014 and incorporated by reference herein)
4.2 **	Form of Indenture
4.3 +	Form of Note
4.4 +	Form of Warrant Agreement (including form of warrant certificate)
4.5 +	Form of Unit Agreement (including form of unit certificate)
5.1 *	Opinion of Ballard Spahr LLP
23.1 *	Consent of BDO USA, LLP
23.2 *	Consent of BDO S.p.A.
23.3 *	Consent of Ballard Spahr LLP (included in Exhibit 5.1)
24.1 **	Power of Attorney
24.2 *	Power of Attorney
25.1 +	Statement of Eligibility of Trustee under the Indenture on Form T-1, to be filed separately pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939
+ To be f	

Registration Statement if securities are sold through one or more underwriters.

Filed herewith.

** Previously filed.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

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

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent posteffective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the

total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "**Calculation of Registration Fee**" table in the effective registration statement; and

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

Provided, however, that:

Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof, provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness, provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or modify any statement that was made in the registration statement or prospectus that was part of the registration statement immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule

424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby further undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in said act and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(e) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of section 310 of the Trust Indenture Act ("Act") in accordance with the rules and regulations prescribed by the Commission under section 305(b)(2) of the Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this post-effective amendment to this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Morrisville, State of North Carolina on the 8th day of March 2016.

TransEnterix, Inc.

By: /s/ Todd M. Pope

Todd M. Pope President and Chief Executive Officer (principal executive officer)

By: /s/ Joseph P. Slattery Joseph P. Slattery Executive Vice President and Chief Financial Officer (principal financial officer and principal accounting officer)

Pursuant to the requirements of the Securities Act of 1933, as amended, this post-effective amendment to this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Todd M. Pope Todd M. Pope	President, Chief Executive Officer and Director (principal executive officer)	March 8, 2016
/s/ Joseph P. Slattery Joseph P. Slattery	Executive Vice President and Chief Financial Officer (principal financial officer and principal accounting officer)	March 8, 2016
* Paul A. LaViolette	Chairman of the Board	March 8, 2016
* Andrea Biffi	Director	March 8, 2016
* Dennis J. Dougherty	Director	March 8, 2016
* Jane H. Hsiao	Director	March 8, 2016

Joseph P. Slattery Attorney-in-fact

Signature	Title	Date
*	Director	March 8, 2016
William N. Kelley		
*	Director	March 8, 2016
Aftab R. Kherani		
*	Director	March 8, 2016
David B. Milne		
*	Director	March 8, 2016
Richard C. Pfenniger, Jr.		
*	Director	March 8, 2016
William N. Starling, Jr.		
* By: /s/ Joseph P. Slattery		

Ballard Spahr

1735 Market Street, 51st Floor Philadelphia, PA 19103-7599 TEL 215.665.8500 FAX 215.864.8999 www.ballardspahr.com

March 8, 2016

TransEnterix, Inc. 635 Davis Drive, Suite 300 Morrisville, NC 27713

RE: TransEnterix, Inc.

Ladies and Gentlemen:

We have acted as counsel to TransEnterix, Inc., a Delaware corporation (the "<u>Company</u>"), in connection with the preparation and filing with the Securities and Exchange Commission (the "<u>Commission</u>") of the Company's Post-Effective Amendment No.1 to the Registration Statement on Form S-3 (File No. 333-199998), dated the date hereof (the "<u>Registration Statement</u>"), under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), relating to the issuance and/or sale by the Company from time to time of an aggregate an additional \$50,000,000 of (i) shares of common stock, par value \$0.001 (the "<u>Common Stock</u>"), (ii) shares of preferred stock, par value \$0.01 ("<u>Preferred Stock</u>"), (iii) senior and/or subordinated debt securities (the "<u>Debt Securities</u>"), (iv) warrants (the "<u>Warrants</u>") and/or (v) units composed of any of the foregoing (the "<u>Units</u>"). The Common Stock, the Preferred Stock, the Debt Securities, the Warrants and the Units are collectively referred to in this opinion as the "<u>Securities</u>." When added to the amount originally registered for offer and sale of Securities under the Registration Statement, the full capacity under the Registration Statement is \$150,000,000, of which \$68,800,000 remains available for future offers and sales under the Registration Statement.

The Company has informed us that the Securities will be sold or delivered on a delayed or continuous basis from time to time as set forth in the Registration Statement (and any amendments thereto), the prospectus contained therein and any prospectus supplement. We understand that prior to the sale of any Securities under the Registration Statement, the Company will afford us an opportunity to review the operative documents pursuant to which such Securities are to be sold and will file any applicable amendment to the Registration Statement or Current Report on Form 8-K (which may include as an exhibit an updated legal opinion) or prospectus supplement as we may reasonably consider necessary or appropriate by reason of the terms of the sale of such Securities.

In so acting, we have examined originals or copies (certified or otherwise identified to our satisfaction) of (i) the Amended and Restated Certificate of Incorporation of the Company together with all amendments thereto; (ii) the Amended and Restated Bylaws of the Company; (iii) the Registration Statement and the exhibits thereto; (iv) the prospectus contained within the Registration Statement; (v) such corporate records, agreements, documents and other instruments; and (vi) such certificates or comparable documents of public officials and other sources believed by us to be

Atlanta | Baltimore | Bethesda | Denver | Las Vegas | Los Angeles | New Jersey | New York | Philadelphia | Phoenix | Salt Lake City | San Diego | Washington, DC | Wilmington | www.ballardspahr.com

TransEnterix, Inc. March 8, 2016 Page 2

reliable, and of officers and representatives of the Company, and have made such inquiries of such officers and representatives, as we have deemed relevant and necessary as a basis for the opinions hereinafter set forth.

In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents. As to all questions of fact material to this opinion that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

We have also assumed that (i) the Registration Statement and any amendments or supplements thereto (including any post-effective amendments) will have become effective and comply with all applicable laws and no stop order suspending the Registration Statement's effectiveness will have been issued and remain in effect, in each case, at the time the Securities are offered or issued as contemplated by the Registration Statement, (ii) a prospectus supplement will have been prepared and filed with the Commission describing the Securities offered thereby and will at all relevant times comply with all applicable laws, (iii) the Company has timely filed all necessary reports pursuant to the Securities Exchange Act of 1934, as amended, which are incorporated into the Registration Statement by reference, (iv) all Securities will be issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the appropriate prospectus supplement, (v) a definitive purchase, underwriting or similar agreement and any other necessary agreement with respect to any Securities will have been duly authorized and validly executed and delivered by the Company and the other party or parties thereto and (vi) any Securities issuable upon conversion, exercise or exchange of any Securities being offered or issued will be duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exercise or exchange.

Based on the foregoing, and subject to the qualifications stated herein, we are of the opinion that:

1. <u>Common Stock</u>. Assuming that the issuance and terms of any Common Stock and the terms of the offering thereof have been duly authorized, when (i) the Company has received the consideration therefore specified in any applicable underwriting agreement or purchase agreement approved by the Company's board of directors or any authorized committee thereof, (ii) the consideration for such Common Stock is at least equal to the aggregate par value of such Common Stock, (iii) in the case of any Common Stock to be issued under any Warrants, upon due exercise and delivery of any payment of the exercise price specified in such Warrants, and (iv) in the case of any Common Stock to be issued upon the exchange or conversion of Debt Securities, Preferred Stock, Warrants and other rights that are exchangeable for or convertible into Common Stock, due exercise of such exchange or conversion rights in accordance with the terms of the applicable instruments, such Common Stock (including any Common Stock that may be issued as part of Units or upon exercise, conversion, exchange or otherwise pursuant to the terms of any other Securities) will be validly issued, fully paid and non-assessable.

TransEnterix, Inc. March 8, 2016 Page 3

2. <u>Preferred Stock</u>. Assuming that the issuance and terms of any series of Preferred Stock and the terms of the offering thereof have been duly authorized, when (i) a Certificate of Designation fixing and determining the terms of the Preferred Stock has been duly filed with the Secretary of State of the State of Delaware and accepted for record, (ii) the Company has received the consideration therefore specified in any applicable underwriting agreement or purchase agreement approved by the Company's board of directors or any authorized committee thereof, (iii) the consideration for such Preferred Stock is at least equal to the aggregate par value of such Preferred Stock and (iv) in the case of any Preferred Stock to be issued under any Warrants, upon due exercise and delivery of any payment of the exercise price specified in such Warrants, such Preferred Stock (including any Preferred Stock that may be issued as part of Units or upon exercise, conversion, exchange or otherwise pursuant to the terms of any other Securities) will be validly issued, fully paid and nonassessable.

3. Debt Securities. Assuming that the issuance and terms of any Debt Securities and the terms of the offering thereof have been duly authorized, when (i) an indenture filed as an exhibit to the Registration Statement (an "Indenture") has been duly executed, authorized and delivered by all parties thereto substantially in the form so filed, and any applicable supplemental indenture relating to such Debt Securities has been duly executed, authorized and delivered by all parties thereto, (ii) the terms of the Debt Securities to be issued under the applicable Indenture and any applicable supplemental indenture and of their issuance and sale have been duly established in conformity with such Indenture and any applicable supplemental indenture so as not to violate any applicable law, affect the enforceability of such Debt Securities or result in a default under or breach of any agreement or instrument binding on the Company, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, and (iii) the Debt Securities have been duly executed and authenticated in accordance with such applicable Indenture and any applicable supplemental indenture and sold as contemplated in the Registration Statement and any prospectus supplement relating thereto, and in accordance with any underwriting agreement or purchase agreement approved by the Company's board of directors or any authorized committee thereof, such Debt Securities (including any Debt Securities that may be issued as part of Units or otherwise pursuant to the terms of any other Securities) will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

4. <u>Warrants</u>. Assuming that the issuance and terms of such Warrants and the terms of the offering thereof have been duly authorized, when (i) the Warrant agreement or Warrant agreements relating to such Warrants have been duly authorized, executed and delivered by the Company and the warrant agrent has been appointed by the Company, (ii) the terms of such Warrants have been duly established so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirement or restriction imposed by any court or governmental or regulatory body having jurisdiction over the Company, and (iii) such Warrants and any certificates representing such Warrants have been duly executed, authenticated, issued, paid for and delivered as contemplated in the Registration Statement and any prospectus supplement relating thereto, and in accordance with any underwriting agreement or purchase agreement approved by the Company's board of directors or

TransEnterix, Inc. March 8, 2016 Page 4

any authorized committee thereof, such Warrants (including any Warrants that may be issued as part of Units or otherwise pursuant to the terms of any other Securities) will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

5. <u>Units</u>. Assuming that the issuance and terms of such Units and the terms of the offering thereof have been duly authorized, when (i) the Unit agreement or Unit agreements relating to such Units have been duly authorized, executed and delivered by the Company and the warrant agent appointed by the Company, (ii) the terms of such Units have been duly established so as not to violate any applicable law, affect the enforceability of such Units or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirement or restriction imposed by any court or governmental or regulatory body having jurisdiction over the Company, and (iii) such Units have been duly executed and authenticated in accordance with the applicable Unit agreement and issued, paid for and delivered as contemplated in the Registration Statement and any prospectus supplement relating thereto, and any underwriting agreement or purchase agreement approved by the Company's board of directors or any authorized committee thereof, such Units (including any Units that may be issued upon exercise, conversion, exchange or otherwise pursuant to the terms of any other Securities) will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

The opinions expressed above with respect to validity, binding effect and enforceability are subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws affecting creditors' rights and remedies generally, and subject, as to enforceability, to general principles of equity, including principles of commercial reasonableness, good faith and fair dealing (regardless of whether enforcement is sought in a proceeding at law or in equity) and except that rights to indemnification and contribution thereunder may be limited by federal or state securities laws or public policy relating thereto.

We express no opinion as to the laws of any jurisdiction other than the federal laws of the United States of America and the laws of the State of Delaware and, with respect to opinion paragraph 3, the laws of the State of New York.

We hereby consent to the use of this letter as an exhibit to the Registration Statement and to any and all references to our firm in the prospectus which is a part of the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations of the SEC promulgated thereunder.

Sincerely yours,

/s/ Ballard Spahr LLP

CONSENT OF

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

TransEnterix, Inc. Morrisville, North Carolina

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our reports dated March 3, 2016, relating to the consolidated financial statements and the effectiveness of TransEnterix, Inc.'s internal control over financial reporting appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2015. Our report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, LLP

Raleigh, North Carolina March 8, 2016

Consent of Independent Auditor

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated December 3, 2015, relating to the carve-out financial statements of ALF-X System (a carve-out of SOFAR S.p.A.) appearing in the Current Report on Form 8-K/A filed by TransEnterix, Inc. on December 4, 2015.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO S.p.A. Milano, Italy

March 8, 2016

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENT, that the undersigned director of TransEnterix, Inc. constitutes and appoints Todd M. Pope, Joseph P. Slattery and Joshua B. Weingard, and each of them, as the true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign a post-effective amendment to the Registration Statement on Form S-3 (SEC File No. 333-199998 (the "Shelf Registration Statement") to register an additional \$50,000,000 of securities for offerings by the Company from time to time, and to make other changes to the for Shelf Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, any revisions, amendments, supplements or post-effective amendment(s) (each, an "Amendment") to the Shelf Registration Statement, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

March 7, 2016

/s/ William N. Kelley, M.D.

William N. Kelley, M.D.

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENT, that the undersigned director of TransEnterix, Inc. constitutes and appoints Todd M. Pope, Joseph P. Slattery and Joshua B. Weingard, and each of them, as the true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign a post-effective amendment to the Registration Statement on Form S-3 (SEC File No. 333-199998 (the "Shelf Registration Statement") to register an additional \$50,000,000 of securities for offerings by the Company from time to time, and to make other changes to the for Shelf Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, any revisions, amendments, supplements or post-effective amendment(s) (each, an "Amendment") to the Shelf Registration Statement, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

March 8, 2016

/s/ Andrea Biffi

Andrea Biffi