UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

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 No.)

635 Davis Drive, Suite 300

Morrisville, North Carolina 27560

(Address of Principal Executive Offices)(Zip Code)

TRANSENTERIX, INC.

AMENDED AND RESTATED INCENTIVE COMPENSATION PLAN, AS AMENDED

(Full title of the plan)

Joshua B. Weingard, Esq. Chief Legal Officer

TransEnterix, Inc.

4400 Biscayne Boulevard

Miami, Florida 33137

(Name and address of agent for service)

(305) 575-4602

(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, Pennsylvania 19103

| | 215-665-8500 | | |
|-------------------------|--|---|-------------|
| - | whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a elerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchang | | he |
| Large accelerated filer | | Accelerated filer | \boxtimes |
| Non-accelerated filer | \square (Do not check if a smaller reporting company) | Smaller reporting company | |
| | ompany, indicate by check mark if the registrant has elected not to use the extended transition peing standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box | Emerging growth company riod for complying with any new | or |
| | | | = |

CALCULATION OF REGISTRATION FEE

| Title of Securities to be Registered | Amount to be Registered(1) | Proposed Maximum Offering Price(2) | Proposed Maximum Aggregate Offering Price(2) | Amount of Registration Fee |
|---|----------------------------------|--|---|-------------------------------|
| Common Stock, par value \$.001 | 7,000,000 shares | \$0.70 | \$4,900,000 | \$567.91 |

- (1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended, or the Securities Act, this registration statement, or this Registration Statement, also covers an indeterminate number of additional shares of Common Stock issuable under the equity plan described below in the event the number of outstanding shares of the Registrant is increased by reason of any stock dividend, stock split, recapitalization, merger, consolidation or reorganization or similar transaction.
- (2) Estimated solely for the purpose of calculating the registration fee. In accordance with Rule 457(h) promulgated under the Securities Act, the price shown is based upon the average of the high and low prices reported for the Common Stock on the NYSE MKT on June 27, 2017.

EXPLANATORY NOTE

TransEnterix, Inc., or the Registrant, is filing this Registration Statement to register 7,000,000 additional shares of its common stock, \$0.001 par value per share, or Common Stock, for issuance under the TransEnterix, Inc. Amended and Restated Incentive Compensation Plan, as amended, or the Plan. The Plan was originally approved by the Registrant's board of directors, or the Board, and adopted by the majority of the Registrant's stockholders on November 13, 2007. The Plan was later amended and restated, and approved by the Board and by a majority of the Registrant's stockholders on October 29, 2013, to increase the number of shares of Common Stock authorized under the Plan to 4,940,000 shares, and to make other changes. An amendment to increase the number of shares of Common Stock authorized under the Plan to 11,940,000 shares was approved by the Board on February 4, 2015 and was approved by the Registrant's stockholders on May 7, 2015. An amendment to further increase the number of shares of Common Stock authorized under the Plan to 18,940,000 shares was approved by the Board on April 27, 2016 and was approved by the Registrant's stockholders on June 8, 2016. Another amendment to increase the number of shares of Common Stock authorized under the Plan to 25,940,000 shares was approved by the Board on February 2, 2017 and was approved by the Registrant's stockholders on May 25, 2017.

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

As permitted by the rules of the United States Securities and Exchange Commission, or the Commission, this Registration Statement omits the information specified in the instructions to Part I of Form S-8. Documents containing such information will be sent or given to participants in the employee benefit plans (as defined in Rule 405 under the Securities Act) covered by this Registration Statement as required by Rule 428(b)(1) under the Securities Act. Those documents are not being filed with the Commission as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act. Those documents, and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II hereof, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents, filed or to be filed with the Commission pursuant to the Securities Exchange Act of 1934, as amended, or the Exchange Act, are incorporated herein by reference:

- the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Commission on March 6, 2017;
- the Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 2017, filed with the Commission on May 10, 2017;
- the Registrant's Current Reports on Form 8-K filed with the Commission on January 5, 2017 (Items 1.01, 8.01 and 9.01), February 23, 2017 (Item 8.01 and 9.01), April 28, 2017 (Items 1.01, 1.02, 8.01 and 9.01), May 3, 2017 (Item 8.01), May 10, 2017 (Items 1.01, 1.02, 2.03, 3.03, 8.01 and 9.01), May 25, 2017 (Items 5.02, 5.07 and 9.01) and June 6, 2017 (Items 5.02 and 9.01); and
- the description of the 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.

In addition, all reports and other documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such document. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. The statements required to be so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The Registrant is a Delaware corporation. The Delaware General Corporation Law, or DGCL, and certain provisions of the Registrant's bylaws under certain circumstances provide for indemnification of the Registrant's 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 the Registrant's 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.

The Registrant's bylaws provide for the indemnification described above and requires that any such indemnification only be made by the Registrant upon a determination that the applicable standard of conduct has been met, which determination shall be made (a) by the Board, 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.

The Registrant's bylaws also authorize the Board, 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 the Registrant's bylaws.

Section 102(b)(7) of the DGCL permits, and the Registrant's Amended and Restated Certificate of Incorporation provide, that no director shall be personally liable to the Registrant 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 Registrant 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.

The Registrant has entered into an indemnification agreement with each of its directors and executive officers. The indemnification agreements provide indemnification to each director or executive officer, or 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 Registrant, 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 Registrant, 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 Registrant, 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 Registrant 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 the Registrant to purchase and maintain insurance which protects the Registrant's officers and directors against any liabilities incurred in connection with their service in such a position, and such a policy may be obtained by the Registrant.

A stockholder's investment may be adversely affected to the extent the Registrant pays 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 the Registrant's directors, officers or employees regarding which indemnification is sought, nor is the Registrant 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 the Registrant pursuant to the foregoing provisions, the Registrant has been informed that, in the opinion of the Commission, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

The Exhibits to this Registration Statement are listed in the Exhibit Index below, which is incorporated herein by reference.

ITEM 9. 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;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent 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 this registration statement or any material change to such information in the registration statement;
- provided, however, that the undertakings set forth in paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement;
- (2) That, for the purpose of determining any liability under the Securities Act, 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; and
- (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.
- (b) The undersigned Registrant hereby further undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act and, where applicable, each filing of the Plan's annual report pursuant to Section 15(d) under the Exchange Act, that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act 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 Commission such indemnification is against public policy as expressed in the Securities Act 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 whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issues.

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-8 and has duly caused 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 30th day of June, 2017.

TransEnterix, Inc.

By: /s/ Todd M. Pope

Todd M. Pope

President and Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each undersigned director of TransEnterix, Inc. constitutes and appoints 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 any or all amendments to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the U.S. 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 or she 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.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title(s) | <u>Date</u> |
|---|---|---------------|
| /s/ Todd M. Pope Todd M. Pope | President, Chief Executive Officer and a Director (principal executive officer) | June 30, 2017 |
| /s/ Joseph P. Slattery Joseph P. Slattery | Executive Vice President and Chief Financial Officer (principal financial officer and principal accounting officer) | June 30, 2017 |
| /s/ Paul A. LaViolette Paul A. LaViolette | Chairman of the Board and a Director | June 30, 2017 |
| /s/ Andrea Biffi Andrea Biffi | Director | June 30, 2017 |
| /s/ Jane H. Hsaio Jane H. Hsaio, Ph.D. | Director | June 30, 2017 |
| /s/ William N. Kelley William N. Kelley, M.D. | Director | June 30, 2017 |
| /s/ Aftab R. Kherani Aftab R. Kherani, M.D. | Director | June 30, 2017 |
| /s/ David B. Milne David B. Milne | Director | June 30, 2017 |
| /s/ Richard C. Pfenniger, Jr. Richard C. Pfenniger, Jr. | Director | June 30, 2017 |
| /s/ William N. Starling, Jr. William N. Starling, Jr. | Director | June 30, 2017 |

EXHIBIT INDEX

| Exhibit <u>Number</u> | <u>Description</u> |
|--------------------------|---|
| 5.1 | Opinion of Ballard Spahr LLP (filed herewith). |
| 10.1 | TransEnterix, Inc. Amended and Restated Incentive Compensation Plan(incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-8, File No. 333-203950, filed with the Commission on May 7, 2015). |
| 10.2 | Exhibit A to the TransEnterix, Inc. Amended and Restated Incentive Compensation Plan (incorporated by reference to Exhibit 10.13.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 3, 2016). |
| 10.3 | Amendment to the TransEnterix, Inc. Amended and Restated Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on June 10, 2016) |
| 10.4 | Amendment to the TransEnterix, Inc. Amended and Restated Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on May 25, 2017) |
| 23.1 | Consent of BDO USA, LLP (filed herewith). |
| 23.2 | Consent of Ballard Spahr LLP (contained in Exhibit 5.1). |
| 24.1 | Power of Attorney (on signature page). |
| | |



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

June 30, 2017

TransEnterix, Inc. 635 Davis Drive, Suite 300 Morrisville, NC 27560

Re: TransEnterix, Inc. - Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to TransEnterix, Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-8 (the "Registration Statement"), relating to the registration under the Securities Act of 1933, as amended (the "Securities Act"), and the issuance of up to 7,000,000 additional shares of the Company's common stock, par value \$0.001 per share (the "Shares"), pursuant to the TransEnterix, Inc. Amended and Restated Incentive Compensation Plan, as amended (the "Plan").

In rendering this opinion, we have reviewed the Plan; the Amended and Restated Certificate of Incorporation of the Company, together with all amendments thereto; the Amended and Restated Bylaws of the Company; the Registration Statement and the exhibits thereto and such certificates, documents, corporate records and other instruments and matters of law as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. In rendering this opinion, we are assuming the authenticity of all instruments presented to us as originals, the conformity with the originals of all instruments presented to us as copies and the genuineness of all signatures.

The opinion expressed below is based on the assumption that the Registration Statement has been filed by the Company with the U.S. Securities and Exchange Commission and will have become effective before any of the Shares are issued, and that persons acquiring the Shares will do so strictly in accordance with the terms of the Plan and will receive a prospectus containing all the information required by Part I of the Registration Statement before acquiring such Shares. The opinion is also based on the assumption that the Shares will continue to be duly and validly authorized on the dates that the Shares are issued to participants pursuant to the terms of the Plan and, upon the issuance of any of the Shares, the total number of shares of common stock of the Company issued and outstanding, after giving effect to such issuance of such Shares, will not exceed the total number of shares of common stock that the Company is then authorized to issue under its Articles of Incorporation, as amended.

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

TransEnterix, Inc. June 30, 2017 Page 2

Based on the foregoing, we are of the opinion that the Shares, when issued pursuant to the Plan in accordance with the terms and conditions thereof (including, where applicable, the payment of any exercise price, the satisfaction of any vesting or forfeiture restrictions and the achievement of applicable performance goals), will be legally issued, fully paid and non-assessable.

This opinion is limited to the matters expressly stated herein and no implied opinion may be inferred to extend this opinion beyond the matters expressly stated herein. This opinion is limited to the Federal law of the United States of America and to the laws of the State of Delaware.

We consent to the filing of this opinion as Exhibit 5.1 to 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.

Yours truly,

/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 this Registration Statement of our reports dated March 6, 2017, 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, 2016. Our report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ BDO USA, LLP

Raleigh, North Carolina June 30, 2017