TRANSGENOMIC INC Form PRE 14A September 09, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the

Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant x

Filed by a Party other than the Registrant "

Check the appropriate box:

x Preliminary Proxy Statement "Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) "Definitive Proxy Statement "Definitive Additional Materials "Soliciting Material Pursuant to §240.14a-12

Transgenomic, Inc. (Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box): xNo fee required.

"Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4)Proposed maximum aggregate value of transaction:

(5)Total fee paid:

"Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by the Exchange Act Rule 0-11(a)(2) and identify the filing for "which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount previously paid:

(2)Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

TRANSGENOMIC, INC.

12325 Emmet Street

Omaha, Nebraska 68164

[], 2016

Dear Stockholder:

You are cordially invited to attend our Special Meeting of Stockholders, which will be held at the offices of [], on Wednesday, October 12, 2016 at [] [Central] Daylight Time.

At the Special Meeting, stockholders will be asked to vote on the proposal set forth in the Notice of Special Meeting of Stockholders and the accompanying proxy statement, which describe the formal business to be conducted at the Special Meeting and follow this letter.

It is important that your shares are represented and voted at the Special Meeting regardless of the size of your holdings. Whether or not you plan to attend the Special Meeting, please complete, sign, date and return the accompanying proxy card in the enclosed postage-paid envelope or vote electronically via the Internet or by telephone, if permitted by the broker or other nominee that holds your shares. Voting electronically, by telephone or by returning your proxy card in advance of the Special Meeting does not deprive you of your right to attend the Special Meeting.

If you have any questions concerning the Special Meeting and you are the stockholder of record of your shares, please contact Sandy Takacs at (203) 907-2293. If your shares are held by a broker or other nominee (that is, in "street name"), please contact your broker or other nominee for questions concerning the Special Meeting.

Thank you for your continued support. We look forward to seeing those of you who will be able to attend the Special Meeting.

Sincerely yours,

/s/ PAUL KINNON

Paul Kinnon President, Chief Executive Officer and Interim Chief Financial Officer

TRANSGENOMIC, INC.

12325 Emmet Street

Omaha, Nebraska 68164

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

Notice is hereby given that a Special Meeting of Stockholders of Transgenomic, Inc. (the "Company") will be held at the offices of [], on Wednesday, October 12, 2016 at [] [Central] Daylight Time, for the following purposes:

To authorize the Company's Board of Directors to, in its discretion, amend the Company's Third Amended and (1)Restated Certificate of Incorporation to effect a reverse stock split of the Company's common stock at a ratio of between one-for-ten to one-for-thirty, such ratio to be determined by the Company's Board of Directors; and

(2) To transact such other business as may properly come before the Special Meeting or any adjournment or postponement thereof.

Only stockholders of record at the close of business on September 8, 2016 are entitled to notice of, and to vote at, the Special Meeting.

By Order of the Board of Directors

/s/ PAUL KINNON

Paul Kinnon President, Chief Executive Officer and Interim Chief Financial Officer

Omaha, Nebraska

[], 2016

Important Notice Regarding the Availability of Proxy Materials for the Special Meeting of Stockholders to be held on October 12, 2016: This Proxy Statement and the accompanying form of proxy card are available on the Internet at www.transgenomic.com. Under rules issued by the Securities Exchange Commission (the "SEC"), we are providing access to our proxy materials both by sending you this full set of proxy materials and by notifying you of the availability of our proxy materials on the Internet.

Transgenomic, Inc.

12325 Emmet Street

Omaha, Nebraska 68164

PROXY STATEMENT

for

SPECIAL MEETING OF STOCKHOLDERS

of

TRANSGENOMIC, INC.

GENERAL INFORMATION

We are sending this Proxy Statement to you in connection with our request for your proxy to use at the Special Meeting of Stockholders (the "Special Meeting") of Transgenomic, Inc. (the "Company") to be held on Wednesday, October 12, 2016 at [____] [Central] Daylight Time, at the offices of [____]. Only those owners of our common stock or Series A-1 Convertible Preferred Stock (the "Series A-1 Preferred Stock") of record as of the close of business on September 8, 2016 (the "Record Date") are entitled to vote at the Special Meeting. This Proxy Statement, along with the Notice of the Special Meeting and a proxy card, are being first mailed to stockholders of the Company on or about [____], 2016.

Your proxy is being solicited by the Board of Directors of the Company (the "Board") and will give each member of the Board and our Chief Executive Officer the power to vote on your behalf at the Special Meeting. All shares of the Company's voting stock represented by properly executed and unrevoked proxies will be voted by a member of the Board or the Chief Executive Officer in accordance with the directions given by those proxies. Where no instructions are indicated, the Board or the Chief Executive Officer will vote as follows: (1) "**FOR**" the authorization of the Board to, in its discretion, amend our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split of our common stock at a ratio of between one-for-ten to one-for-thirty, such ratio to be determined by the Board; and

(2) in their discretion upon any other business as may properly come before the Special Meeting or any adjournment or postponement thereof. In addition, the Board believes outstanding voting shares owned by current executive officers and directors of the Company will be voted "**FOR**" Proposal One. Shares owned by these persons represent less than []% of the total shares of our voting stock outstanding as of the Record Date.

You may revoke your proxy at any time before it is exercised by a member of the Board or the Chief Executive Officer at the Special Meeting. If you decide to do this, you will need to give the Secretary of the Company written notice that you want to revoke the proxy or you can submit a new proxy to the Secretary, or submit a new vote electronically via the Internet or by telephone, if permitted by the broker or other nominee that holds your shares. In addition, if you attend the Special Meeting in person, you may withdraw your proxy and vote in person. Shares of common stock and Series A-1 Preferred Stock entitled to vote and represented by properly executed, returned and unrevoked proxies will be considered present at the Special Meeting for purposes of establishing a quorum. This includes shares for which votes are withheld, abstentions are cast or there are broker non-votes. The holders of our common stock and Series A-1 Preferred Stock representing at least a majority of our voting stock issued and outstanding on the Record Date must be present at the Special Meeting, either in person or by proxy, in order for there to be a quorum.

Under rules that govern banks, brokers and others who have record ownership of company stock held in brokerage accounts for their clients who beneficially own the shares, these banks, brokers and other such holders who do not receive voting instructions from their clients have the discretion to vote uninstructed shares on certain matters ("discretionary matters") but do not have discretion to vote uninstructed shares as to certain other matters ("non-discretionary matters"). A broker may return a proxy card on behalf of a beneficial owner from whom the broker has not received voting instructions that casts a vote with regard to discretionary matters but expressly states that the broker is not voting as to non-discretionary matters. The broker's inability to vote with respect to the non-discretionary matters with respect to which the broker has not received voting instructions from the broker has not received voting instructions from the broker as a "broker non-vote."

Banks, brokers and other such record holders are not permitted to vote the uninstructed shares of their customers on a discretionary basis with respect to amendments to certificates of incorporation. Because broker non-votes are not considered under Delaware law to be entitled to vote at the Special Meeting, they will have no effect on the outcome of the vote on Proposal One (authorization of the Board to, in its discretion, amend our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split of our common stock at a ratio of between one-for-ten to one-for-thirty, such ratio to be determined by the Board). As a result, if you hold your shares in street name and you do not instruct your bank, broker or other such holder how to vote your shares in connection with the amendment to our Third Amended and Restated Certificate of Incorporation to effect, it is critical that you indicate your vote on this proposal if you want your vote to be counted.

Required Votes

On the Record Date, there were 23,744,898 issued and outstanding shares of our common stock and 214,705 issued and outstanding shares of Series A-1 Preferred Stock. Each share of common stock is entitled to one vote on each matter to be voted on at the Special Meeting. The holders of Series A-1 Preferred Stock are entitled to 0.93 votes for every one share of Series A-1 Preferred Stock held on each matter to be voted on at the Special Meeting. Accordingly, the owners of Series A-1 Preferred Stock have an aggregate of 199,675 votes with respect to each matter to be voted on at the Special Meeting. The holders of Series A-1 Preferred Stock will vote together as a single class with the holders of common stock on Proposal One.

Proposal One: Authorization of the Board to, in its discretion, amend our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split of our common stock at a ratio of between one-for-ten to one-for-thirty, such ratio to be determined by the Board. The affirmative vote of a majority of the votes cast at the Special Meeting by the holders of our common stock and Series A-1 Preferred Stock, voting together as a single class (with each one share of Series A-1 Preferred Stock being entitled to 0.93 votes), is required to approve the authorization of the Board to, in its discretion, amend our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split of our common stock at a ratio of between one-for-ten to one-for-thirty, such ratio to be determined by the Board. Abstentions will be counted as votes against this proposal. Broker non-votes will not be counted as votes cast for this proposal.

VOTING SECURITIES AND BENEFICIAL OWNERSHIP BY

PRINCIPAL STOCKHOLDERS, DIRECTORS AND OFFICERS

Beneficial Ownership of Common Stock

On the Record Date, there were 23,744,898 issued and outstanding shares of our common stock.

The following table provides information known to us with respect to beneficial ownership of our common stock by our directors, by those of the persons listed as our named executive officers in our proxy statement for the 2016 Annual Meeting of Stockholders, by all of our current executive officers and directors as a group, and by each person we believe beneficially owns more than 5% of our outstanding common stock as of September 8, 2016, the Record Date established for our Special Meeting of Stockholders. Except as indicated in the footnotes to this table, to our knowledge the persons named in the table below have sole voting and investment power with respect to all common stock of the Company beneficially owned and such shares are owned directly by such person. The number of shares

beneficially owned by each person or group as of September 8, 2016 includes shares of common stock that such person or group had the right to acquire on or within 60 days after September 8, 2016, including, but not limited to, upon the exercise of options, stock appreciation rights or warrants to purchase common stock or the conversion of securities into common stock. Beneficial ownership information of persons other than our current executive officers and directors is based on available information including, but not limited to, Schedules 13D, 13F or 13G filed with the Securities and Exchange Commission (the "SEC") or information supplied by these persons.

Name and Address of Beneficial Owner ⁽¹⁾	Number of Shares Beneficially Owned		Percent of Class	
Directors and Executive Officers				
Paul Kinnon, President, Chief Executive Officer, Interim Chief Financial Officer and Director	[]	(2)	[]	%
Leon Richards, Chief Accounting Officer	[]	(3)	[]	%
Doit L. Koppler, II, Director	[]	(4)	[]	%
Robert M. Patzig, Director	[]	(5)	[]	%
Michael A. Luther, Director	[]	(6)	[]	%
Mya Thomae, Director	[]	(7)	[]	%
All directors and executive officers as a group (6 persons)	[]	(8)	[]	%
Other Stockholders				
Randal J. Kirk	[]	(9)	[]	%
Crede CG III, Ltd.	[]	(10)	[]	%
Kevin Douglas	[]	(11)	[]	%

* Represents less than 1% of our outstanding common stock.

⁽¹⁾ The address for all of our directors and executive officers is the address of our principal executive offices located at 12325 Emmet Street, Omaha, Nebraska 68164.

⁽²⁾ Includes [] shares issuable upon the exercise of stock options and stock appreciation rights that are exercisable or will become exercisable within 60 days after September 8, 2016.

⁽³⁾ Includes [] shares issuable upon the exercise of stock options and stock appreciation rights that are exercisable or will become exercisable within 60 days after September 8, 2016.

⁽⁴⁾ Includes (i) 4,166 shares owned by Mr. Koppler, (ii) [] shares issuable upon the exercise of stock options that are exercisable or will become exercisable within 60 days after September 8, 2016, and (iii) [] shares issuable upon the exercise of warrants that are exercisable or will become exercisable within 60 days after September 8, 2016.

⁽⁵⁾ Includes (i) 3,333 shares owned by Mr. Patzig, (ii) [] shares issuable upon the exercise of stock options that are exercisable or will become exercisable within 60 days after September 8, 2016, and (iii) [] shares issuable upon the

exercise of warrants that are exercisable or will become exercisable within 60 days after September 8, 2016.

⁽⁶⁾ Includes [] shares issuable upon the exercise of stock options that are exercisable or will become exercisable within 60 days after September 8, 2016.

⁽⁷⁾ Includes [] shares issuable upon the exercise of stock options that are exercisable or will become exercisable within 60 days after September 8, 2016.

⁽⁸⁾ Includes shares which may be acquired by executive officers and directors as a group within 60 days after September 8, 2016 through the exercise of stock options, stock appreciation rights or warrants.

⁽⁹⁾ Consists of (i) 7,550,669 shares of common stock, (ii) [] shares of common stock issuable upon exercise of warrants to purchase shares of common stock that are currently exercisable, and (iii) 214,705 shares of common stock issuable upon conversion of 214.705 shares of Series A-1 Preferred Stock. Excludes 161,026 shares of common stock issuable upon exercise or exchange of warrants to purchase shares of common stock (the "Placement Warrants") that are not currently exercisable as the exercise thereof is restricted by a blocker provision (the "Warrant Blocker") that restricts the exercise of each Placement Warrant if, as a result of such exercise, the holder of the Placement Warrant, together with its affiliates and any other person whose beneficial ownership of common stock would be aggregated with such holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, would beneficially own in excess of 9.99% of the Company's then issued and outstanding shares of common stock (including the shares of common stock issuable upon such exercise), as such percentage ownership is determined in accordance with the terms of the Placement Warrants. The Warrant Blocker will automatically expire 61 calendar days prior to the expiration date of the Placement Warrants. In addition, if certain approvals from the Company's stockholders and The Nasdaq Stock Market LLC ("Nasdag") to issue any additional shares of common stock pursuant to the exchange right under the Placement Warrants are obtained (the "Placement Warrants Required Approvals"), an additional 99,836 shares of common stock may be issued upon exercise of an exchange right under the Placement Warrants for an aggregate of up to 260,862 shares of common stock issuable upon exchange of the Placement Warrants. The total of the shares of common stock, the warrants to purchase shares of common stock and the shares of Series A-1 Preferred Stock are held by the following companies, which are managed by Third Security, LLC ("Third Security"), which is managed by Randal J. Kirk. Mr. Randal J. Kirk could be deemed to have indirect beneficial ownership of these shares: Third Security Senior Staff 2008 LLC beneficially owns 3,376,983 shares of common stock, which consist of (a) 3,020,267 shares of common stock, (b) 85,882 shares of common stock issuable upon conversion of 85,882 shares of Series A-1 Preferred Stock, and (c) [] shares of common stock issuable upon exercise of warrants to purchase shares of common stock that are not Placement Warrants and are currently exercisable; Third Security Staff 2010 LLC beneficially owns 2,439,429 shares of common stock, which consist of (x) 2,125,654 shares of common stock, (y) 42,941 shares of common stock issuable upon conversion of 42,941 shares of Series A-1 Preferred Stock, and (z) [] shares of common stock issuable upon exercise of warrants to purchase shares of common stock that are not Placement Warrants and are currently exercisable; Third Security Incentive 2010 LLC beneficially owns 1,688,490 shares of common stock, which consist of (1) 1,510,135 shares of common stock, (2) 42,941 shares of common stock issuable upon conversion of 42,941 shares of Series A-1 Preferred Stock, and (3) [] shares of common stock issuable upon exercise of warrants to purchase shares of common stock that are not Placement Warrants and are currently exercisable; Third Security Staff 2014 LLC beneficially owns 937,554 shares of common stock, which consist of (A) 894.613 shares of common stock, and (B) 42,941 shares of common stock issuable upon conversion of 42,941 shares of Series A-1 Preferred Stock. The business address of these beneficial owners is 1881 Grove Avenue, Radford, Virginia 24141.

⁽¹⁰⁾ Consists of 1,612,903 shares of common stock issuable upon exercise or exchange of a Placement Warrant, 1,161,972 shares of common stock issuable upon exercise or exchange of an amended warrant to purchase shares of common stock (the "Amended Warrant") and 667,164 shares of common stock issuable upon exercise of a Series B Warrant to purchase shares of common stock. Each of the Placement Warrant, Amended Warrant and Series B Warrant is subject to the Warrant Blocker. If the Placement Warrants Required Approvals have been obtained, such holder may receive an additional 1,000,000 shares of common stock upon exercise of the exchange right under the Placement Warrant for an aggregate of up to 2,612,903 shares of common stock issuable upon exchange of the Placement Warrant. In addition, if certain approvals from the Company's stockholders and Nasdaq to issue any additional shares of common stock pursuant to the exchange right under the Amended Warrant have been obtained (the "Amended Warrant Required Approvals"), such holder may receive an additional 720,423 shares of common stock upon exercise of the exchange right under the Amended Warrant for an aggregate of up to 2,612,903 shares of a Series and Nasdaq to issue any additional shares of common stock pursuant to the exchange right under the Amended Warrant have been obtained (the "Amended Warrant Required Approvals"), such holder may receive an additional 720,423 shares of common stock upon exercise of the exchange right under the Amended Warrant for an aggregate of up to 1,882,395 shares of

common stock issuable upon exchange of the Amended Warrant. The sole stockholder of Crede CG III, Ltd. is Crede Capital Group, LLC. Acuitas Financial Group, LLC holds all of the membership interests of Crede Capital Group, LLC and Terren Peizer holds all of the membership interests of Acuitas Financial Group, LLC. Voting and dispositive power with respect to the shares held by Crede CG III, Ltd. is exercised by Terren Peizer, the sole and Managing Member of Acuitas Financial Group, LLC and Crede Capital Group, LLC and Managing Director of Crede CG III, Ltd., who acts as investment advisor to these entities. Terren Peizer, Acuitas Financial Group, LLC and Crede Capital Group, LLC disclaim beneficial ownership with respect to the shares held by Crede CG III, Ltd. The business address of Crede Capital Group, LLC is 11601 Wilshire Blvd., Suite 1100, Los Angeles, CA 90025. Information is based solely on a selling stockholder questionnaire provided to the Company by the holder in connection with the Company's preparation of a Registration Statement on Form S-3.

⁽¹¹⁾ Based solely on our review of a Schedule 13G/A filed with the SEC on February 13, 2015, Mr. Douglas has dispositive power over all of the shares owned by the Douglas affiliates. The Douglas affiliates include shares owned directly by James E. Douglas, III as well as shares held in the following trusts: K&M Douglas Trust, Douglas Family Trust and the James Douglas and Jean Douglas Irrevocable Descendants' Trust. The business address of this beneficial owner is 125 East Sir Francis Drake Boulevard, Suite 400, Larkspur, California 94939.

Beneficial Ownership of Preferred Stock

As of September 8, 2016, there were 214,705 issued and outstanding shares of our Series A-1 Preferred Stock.

The following table provides information known to us with respect to beneficial ownership of the Series A-1 Preferred Stock by each person we believe beneficially owns more than 5% of our outstanding Series A-1 Preferred Stock as of September 8, 2016. The number of shares of Series A-1 Preferred Stock beneficially owned by each person or group as of September 8, 2016 includes shares of Series A-1 Preferred Stock that such person or group had the right to acquire on or within 60 days after September 8, 2016, upon the exercise of warrants to purchase Series A-1 Preferred Stock. Except as indicated in the footnotes to this table, to our knowledge the person named in the table below has sole voting and investment power with respect to all of the Series A-1 Preferred Stock beneficially owned and such shares are owned directly by such person. Beneficial ownership information of such person is based on available information including, but not limited to, Schedules 13D, 13F or 13G filed with the SEC or information supplied by this person.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned		Percent of Class	5
Randal J. Kirk	214,705	(1)	100	%

⁽¹⁾ These shares of Series A-1 Preferred Stock are held 40% by Third Security Senior Staff 2008 LLC, 20% by Third Security Staff 2010 LLC, 20% by Third Security Incentive 2010 LLC and 20% by Third Security Staff 2014 LLC, which companies are managed by Third Security, which is managed by Randal J. Kirk. Mr. Randal J. Kirk could be deemed to have indirect beneficial ownership of these shares. The business address of these beneficial owners is 1881 Grove Avenue, Radford, Virginia 24141.

PROPOSAL ONE: AUTHORIZATION OF THE BOARD TO, IN ITS DISCRETION, AMEND OUR THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF OUR COMMON STOCK AT A RATIO OF one-for-TEN to one-for-THIRTY, SUCH RATIO TO BE DETERMINED BY THE BOARD

On September 6, 2016, the Board unanimously adopted resolutions approving, declaring advisable and recommending to the stockholders for their approval a proposal to authorize the Board, in its discretion, to amend our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split of our issued and outstanding common stock at a ratio in the range of one-for-ten to one-for-thirty, such ratio to be determined by the Board. The form of proposed amendment to our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split will be substantially as set forth on <u>Appendix A</u> (subject to any changes required by applicable law). Pursuant to the law of Delaware, our state of incorporation, the Board must adopt any amendment to our Third Amended and Restated Certificate of Incorporation and submit the amendment to our stockholders for their approval of this proposal will grant the Board the authority (but not the obligation), without further action by the stockholders, to carry out such action any time prior to October 12, 2017, one year from the date of the Special Meeting, with the exact exchange ratio and timing to be determined at the discretion of the Board. The exchange ratio range of one-for-ten to one-for-thirty is based on the recent trading price of our common stock.

Purpose of the Reverse Stock Split

The Board is submitting the proposed reverse stock split to our stockholders for approval in order to reduce the number of issued and outstanding shares and to increase the per share trading value of our common stock. The Board believes that the proposed reverse stock split is desirable and should be approved by our stockholders for a number of reasons, including, without limitation, the following:

•The reverse stock split would help us to maintain our listing on the Nasdaq Capital Market. By potentially increasing the per share trading value of our common stock, the reverse stock split would reduce the risk that our common stock could be delisted from the Nasdaq Capital Market. To maintain our listing on the Nasdaq Capital Market, we must comply with Nasdaq Marketplace Rules, which requirements include a minimum bid price of \$1.00 per share. On February 23, 2016, we were notified by the staff of Nasdaq that we were not in compliance with the \$1.00 minimum bid price requirement, as our common stock had traded below the \$1.00 minimum bid price for 30 consecutive business days. We were provided with a 180 calendar day period, which ended on August 22, 2016, within which to regain compliance. On August 24, 2016, we received a determination letter from the staff of Nasdaq stating that we had not regained compliance with the minimum bid price requirement and that we were not eligible for an additional 180 calendar day extension because we were not in compliance with the minimum stockholders' equity requirement of the Nasdaq Marketplace Rules, which requires listed companies to maintain stockholders' equity of at least \$2,500,000. On August 29, 2016, we requested a hearing before the Nasdaq Hearings Panel where we intend to present a plan to regain compliance with both the minimum bid price requirement and the minimum stockholders' equity requirement and request additional time within which to regain compliance. The hearing has been scheduled

for October 13, 2016. Our common stock will remain listed on the Nasdaq Capital Market pending a written decision following the hearing. In the event that the Nasdaq Hearings Panel determines to delist our common stock from the Nasdaq Capital Market, and if our common stock is not then eligible for quotation on another market or exchange, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board.

If we are successful in maintaining a higher stock price, it may improve the perception of our common stock as an investment security and may generate greater interest among a broader range of institutional and other professional investors and institutions in us, as we have been advised that the current market price of our common stock may affect its acceptability to certain members of the investing public.

The Board of believes that the increased market price of the common stock expected as a result of implementing the reverse stock split could improve the marketability of our common stock, which could allow us to raise additional capital and in turn permit us to satisfy the minimum stockholders' equity requirement imposed by the Nasdaq Marketplace Rules.

The reverse stock split could decrease price volatility, as small price movements currently may cause relatively large percentage changes in our stock price.

The reverse stock split may help increase analyst and broker interest in our stock as their policies can discourage them from following or recommending companies with lower stock prices. Because of the trading volatility often associated with lower-priced stocks, many brokerage houses and institutional investors have adopted internal policies and practices that either prohibit or discourage them from investing in such stocks or recommending them to their customers. Institutional investors typically are restricted from investing in companies whose stock trades at less than \$4.00 per share. Stockbrokers are also subject to restrictions on their ability to recommend stocks trading at less than \$5.00 per share because of the general presumption that such securities may be highly speculative. Some of these internal policies and practices may also function to make the processing of trades in lower-priced stocks economically unattractive to brokers. Additionally, because brokers' commissions on higher-priced stocks, the current average price per share of our common stock can result in individual stockholders paying transaction costs representing a higher percentage of their total share value than would be the case if the share price were substantially higher.

A higher market price per share for our common stock may help us attract and retain employees because some • potential employees are less likely to work for a company with a low stock price, especially below \$1.00 per share, regardless of our market capitalization.

The availability of additional shares of common stock would provide us with the flexibility to consider and respond to future business opportunities and needs as they arise, including equity offerings and other issuances, mergers, business combinations or other strategic transactions, asset acquisitions, stock dividends, stock splits and other corporate purposes.

Accordingly, for these reasons, we believe that effecting the reverse stock split is in our and our stockholders' best interests.

Reducing the number of outstanding shares of our common stock through the reverse stock split is intended, absent other factors, to increase the per share market price of our common stock. A number of the anticipated benefits of the proposed reverse stock split discussed above are contingent upon the split resulting in an increase in the per share market price of our common stock. However, other factors, such as our financial results, market conditions and the market perception of our business may adversely affect the market price of our common stock. As a result, there can be no assurance that the reverse stock split, if completed, would result in the intended benefits described above, that the market price of our common stock will increase following the reverse stock split or that the market price of our common stock after a reverse stock split will increase in proportion to the reduction in the number of shares of our common stock outstanding before the reverse stock split. Accordingly, the total market capitalization of our common stock split.

Certain Risks Associated with the Reverse Stock Split

The reverse stock split may not increase the price of the common stock.

Although the Board expects that a reverse stock split will result in an increase in the price of our common stock, the effect of a reverse stock split cannot be predicted with certainty. Other factors, such as our financial results, market conditions and the market perception of our business, may adversely affect the stock price. As a result, there can be no assurance that the reverse stock split, if completed, will result in any of the intended benefits described above, that the stock price will increase as a result of or following the reverse stock split (or will increase in the same proportion as the final reverse stock split ratio) or that the stock price will not decrease in the future.

Moreover, a decline in the market price of the common stock after the reverse stock split may result in a greater percentage decline than would occur in the absence of the reverse stock split. The market price of the common stock is based on our performance and other factors, which are unrelated to the number of shares of common stock outstanding.

10

If the reverse stock split is implemented, the resulting per-share price may not attract institutional investors, investment funds or brokers and may not satisfy the investing guidelines of these investors or brokers, and consequently, the trading liquidity of our common stock may not improve.

While we believe that a higher share price may help generate investor and broker interest in the common stock, the reverse stock split may not result in a share price that will attract institutional investors or investment funds or satisfy the investing guidelines of institutional investors, investment funds or brokers. For example, some investors, analysts and other stock market participants have a negative perception of reverse stock splits due to: (1) the fact that the stock price of some companies that have effected reverse stock splits has subsequently declined in share price and corresponding market capitalization, (2) the potential that the reduction in shares outstanding could have adversely impact the liquidity of our common stock; and (3) the costs associated with implementing a reverse stock split. In addition, no assurances can be given that the reverse stock split will increase the price of our common stock to a level in excess of the five dollar threshold discussed above or otherwise to a level that is attractive to brokerage houses and institutional investors.

There can be no assurance that we will be able to meet all of the requirements for the continued listing of our common stock on the Nasdaq Capital Market after a reverse stock split.

Although the Board believes that a reverse stock split may allow us to meet the minimum bid price requirements of The Nasdaq Capital Market, there is no guarantee that it will do so. Even if the market price per post-reverse stock split share remains in excess of \$1.00 per share, our common stock may be delisted due to a failure to meet other continued listing requirements, including Nasdaq requirements related to the minimum number of shares that must be in the public float and the minimum market value of the public float. Specifically, on April 20, 2016, we received written notice (the "Notice") from Nasdaq indicating that, based on the stockholders' equity reported in Transgenomic's Annual Report on Form 10-K, as filed with the SEC on April 14, 2016, we were not in compliance with the minimum stockholders' equity requirement for continued listing on the Nasdaq Capital Market, which requires listed companies to maintain stockholders' equity of at least \$2,500,000. On August 29, 2016, we requested a hearing before the Nasdaq Hearings Panel where we intend to present a plan to regain compliance with both the minimum bid price requirement and the minimum stockholders' equity requirement and request additional time within which to regain compliance. The hearing has been scheduled for October 13, 2016. In the event that the Nasdaq Hearings Panel determines to delist our common stock from the Nasdaq Capital Market, and if our common stock is not then eligible for quotation on another market or exchange, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. The delisting of our common stock from the Nasdaq Capital Market may result in decreased liquidity, increased volatility in our common stock, a loss of current or future coverage by certain sell-side analysts and/or a diminution of institutional investor interest. Delisting could also cause a loss of confidence of our collaborators, vendors and employees, which could harm our business and future prospects.

The reverse stock split may result in some stockholders owning "odd lots" of fewer than 100 shares of the common stock. Odd lot shares may be more difficult to sell, and brokerage commissions and other costs of transactions in odd lots are generally somewhat higher than the costs of transactions in "round lots" of even multiples of 100 shares.

Board Discretion to Implement the Reverse Stock Split

.

.

The Board believes that stockholder approval of a range of reverse stock split ratios (rather than a single exchange ratio) is in the best interests of our stockholders because it provides the Board with the flexibility to achieve the desired results of the reverse stock split and because it is not possible to predict market conditions at the time the reverse stock split would be implemented. If stockholders approve this proposal, the Board would have the authority, but not the obligation, in its sole discretion and without any further action on the part of the stockholders, to carry out a reverse stock split only upon the Board's determination that a reverse stock split would be in the best interests of our stockholders at that time. The reverse stock split, if implemented, would be effected at a time that the Board determines to be most advantageous to us and to our stockholders. The Board would then set the ratio for the reverse stock split within the range approved by stockholders and in an amount it determines is advisable and in the best interests of the stockholders considering relevant market conditions at the time the reverse stock split is to be implemented. In determining the ratio, following receipt of stockholder approval, the Board may consider, among other things:

the historical prices and trading volume of our common stock;

the then-prevailing trading price and trading volume of our common stock and the anticipated impact of the reverse stock split on the trading market for our common stock;

the aggregate market value of our common stock held by non-affiliates;

the outlook for the trading price of our common stock;

threshold prices of brokerage houses or institutional investors that could impact their ability to invest or recommend investments in our common stock;

our stockholders' equity at such time; and

prevailing general market and economic conditions.

Although approval of this proposal would provide the Board with the authority to carry out a reverse stock split, the Board is not obligated to do so. If the Board determines to effect the reverse stock split, it intends to select a reverse stock split ratio that it believes would be most likely to achieve the anticipated benefits of the reverse stock split described above. Notwithstanding approval of the reverse stock split by our stockholders, the Board may, in its sole discretion, abandon the proposal and determine, prior to the effectiveness of any filing with the Secretary of State of the State of Delaware, not to effect the reverse stock split. If the Board fails to implement the reverse stock split on or prior to the first anniversary date of the Special Meeting, stockholder approval again would be required prior to implementing any reverse stock split.

Procedures for Effecting the Reverse Stock Split and Filing Amended and Restated Certificate of Incorporation to Effect the Reverse Stock Split

If our stockholders approve the reverse stock split, the Board will have discretion as to whether or not to effect the reverse stock split at any time prior to the first anniversary date of the Special Meeting. If implemented by the Board, the reverse stock split would become effective upon the filing of the amendment to our Third Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware. The actual timing of any such filing will be made by the Board at such time as the Board believes to be most advantageous to us and our stockholders. If the Board, in its sole discretion, determines to effect the reverse stock split, the form of proposed amendment to our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split will be substantially as set forth on Appendix A (subject to any changes required by applicable law).

Principal Effects of the Reverse Stock Split

Effect on Existing Common Stock

If the reverse stock split is implemented, the number of shares of common stock issued and outstanding will be reduced from 23,744,898 shares (as of September 8, 2016, the Record Date of the Special Meeting) to between approximately 791,496 shares and 2,374,489 shares, depending on which exchange ratio is ultimately effected and when the reverse stock split is effected. As described below under "Mechanics of the Reverse Stock Split—Fractional Shares," cash will be paid in lieu of the issuance of fractional shares. Subject to the treatment of fractional shares, (1) the change in the number of shares of common stock outstanding that will result from the reverse stock split will not

affect any stockholder's percentage ownership in the Company, and (2) the relative voting and other rights that accompany the shares of common stock will not be affected by the reverse stock split.

Although the reverse stock split will not have any dilutive effect on our stockholders (other than de minimis adjustments that may result from the treatment of fractional shares), the proportion of shares owned by our stockholders relative to the number of shares authorized for issuance will decrease because the number of authorized shares of common stock would remain at 150,000,000. As a result, additional authorized shares of common stock will be available for issuance at such times and for such purposes as the Board may deem advisable without further action by our stockholders, except as required by applicable laws and regulations. Since we are not reducing the total authorized number of shares of common stock under our Third Amended and Restated Certificate of Incorporation, we will have the ability to issue more than 100 million shares of our common stock without seeking further stockholder approval, which might significantly dilute the ownership of our current stockholders.

At the present time, the Company does not have any plans, proposals or arrangements, written or otherwise, to issue any of the authorized but unissued shares of common stock that would become available as a result of the effectiveness of the amendment to our Third Amended and Restated Certificate of Incorporation to effect the reverse stock split of our outstanding shares of common stock. However, it is highly likely that we will issue additional shares in the future. Please see "Potential Anti-Takeover Effects" below for more information.

After the reverse stock split, we will continue to be subject to the periodic reporting and other requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Assuming we are otherwise able to maintain our listing on the Nasdaq Capital Market, our common stock will continue to be listed on the Nasdaq Capital Market under the symbol "TBIO," although the exchange will add the letter "D" to the end of the trading symbol for a period of 20 trading days after the effective time to indicate that a reverse stock split has occurred. Following the reverse stock split, our common stock will have a new CUSIP number. As of the Record Date for the Special Meeting, there were [] holders of record of our common stock. Following the completion of a one-for-ten reverse stock split, there would be approximately [] holders of record of our common stock and we would expect to pay approximately \$\$[] in cash in lieu of fractional shares. Following the completion of a one-for-thirty reverse stock split, there would be approximately [] holders of record of our common stock and we would expect to pay approximately \$\$[] in cash in lieu of fractional shares. Following the completion of a one-for-thirty reverse stock split, there would be approximately [] holders of record of our common stock and we would expect to pay approximately \$\$[] in cash in lieu of fractional shares. The reverse stock split is not being pursued in order to reduce the number of Company stockholders below 300, and is not a part of a transaction or series of transactions that has either a reasonable likelihood or a purpose of producing, either directly or indirectly, the effects referred to in Rule 13e-3(a)(3)(ii) under the Exchange Act. Please see "Potential Anti-Takeover Effects" below for more information.

Effect on Existing Preferred Stock

The total authorized shares of Preferred Stock is 15,000,000, of which 2,365,243 shares have been designated Series A-1 Preferred Stock. As of September 8, 2016, the Record Date of the Special Meeting, 214,705 shares of Series A-1 Preferred Stock were outstanding. Each share of Series A-1 Preferred Stock is currently convertible into one share of common stock and we have reserved 214,705 shares of common stock for issuance upon the conversion of our outstanding shares of Series A-1 Preferred Stock. Pursuant to the terms of the Certificate of Designation of Series A-1 Convertible Preferred Stock, if we combine our outstanding shares of common stock into a smaller number of shares, as contemplated by the reverse stock split, the conversion rate of the Series A-1 Preferred Stock will be proportionately adjusted. Accordingly, upon effectiveness of the reverse stock split, the number of shares of common stock issuable upon conversion of the Series A-1 Preferred Stock. However, the total number of authorized shares of Preferred Stock and Series A-1 Preferred Stock. However, the total number of authorized shares of Preferred Stock and Series A-1 Preferred Stock and the actual number of outstanding shares of Series A-1 Preferred Stock will remain unchanged upon the effectiveness of the reverse stock split. Other than as described in this paragraph, all of the rights, preferences and other privileges of our Preferred Stock will remain unchanged following the reverse stock split.

Effect on Equity Compensation Plans and Outstanding Common Stock Warrants

The proposed reverse stock split will reduce the number of shares of common stock available for issuance under the 2006 Equity Incentive Plan in proportion to the exchange ratio selected by the Board if the reverse stock split is effected.

Under the terms of our outstanding equity compensation awards and common stock warrants, a reverse stock split would cause a reduction in the number of shares of common stock issuable upon exercise or vesting of such equity awards and common stock warrants in proportion to the exchange ratio selected by the Board, and would cause a proportionate increase in the exercise price of such equity awards and common stock warrants such that the aggregate exercise price payable by the optionee, holder of stock appreciation rights or warrantholder, as applicable, would remain the same. In each case, any fractional share subject to an option or stock appreciation rights resulting from an adjustment pursuant to the foregoing will generally be rounded down to the nearest whole number, and the exercise price per share will generally be rounded up to the nearest whole cent. Fractional shares subject to warrants resulting from an adjustment pursuant to the foregoing will generally be rounded down to the nearest whole number, and the exercise price per share will be rounded to the nearest whole cent.

The following table contains approximate information relating to our common stock, our Preferred Stock, our option, our stock appreciation rights and our warrants under each of the possible split ratios (without giving effect to the

treatment of fractional shares discussed below in "Mechanics of the Reverse Stock Split—Fractional Shares"), based on share information as of September 8, 2016.

Number of authorized shares of Common Stock	September 8, 2016 150,000,000	One-for-Ten 150,000,000	One-for-Twenty 150,000,000	One-for-Thirty 150,000,000
Number of outstanding shares of Common Stock	23,744,898	2,374,489	1,187,244	791,496
Number of authorized shares of Preferred Stock	15,000,000	15,000,000	15,000,000	15,000,000
Number of authorized shares of Series A-1 Preferred Stock	2,365,243	2,365,243	2,365,243	2,365,243
Number of outstanding shares of Series A-1 Preferred Stock	214,705	214,705	214,705	214,705
Number of shares of common stock reserved for issuance upon exercise of outstanding stock options, stock appreciation rights and common stock warrants	[]	[]	[]	[]
Number of shares of common stock reserved for issuance upon conversion of outstanding Series A-1 Preferred Stock	214,705	21,470	10,735	7,156
Number of shares of common stock reserved for issuance in connection with future awards under our equity compensation plans	[]	[]	[]	[]
Number of authorized and unreserved shares of preferred stock not outstanding	12,634,757	12,634,757	12,634,757	12,634,757
Number of authorized and unreserved shares of common stock not outstanding	[]	[]	[]	[]

Potential Anti-Takeover Effects

Since the reverse stock split will result in increased available shares of common stock, it may be construed as having an anti-takeover effect. Although neither the Board nor management views this proposal as an anti-takeover measure, and the Board has no current plans to utilize the additional authorized shares to entrench present management, we could use the increased available shares to resist or frustrate a third-party transaction providing an above-market premium that is favored by a majority of the independent stockholders. For example, we could privately place shares with purchasers who might side with the Board in opposing a hostile takeover bid or issue shares to a holder which would, thereafter, have sufficient voting power to assure that any proposal to amend or repeal our Amended and Restated Bylaws or certain provisions of the Third Amended and Restated Certificate of Incorporation would not receive the requisite vote.

There are no provisions in our Third Amended and Restated Certificate of Incorporation or Amended and Restated Bylaws or other material agreements to which we are a party that would, in our management's judgment, have an anti-takeover effect; however, our Amended and Restated Bylaws contain certain advance notification requirements for nominations of persons for election to the Board and proposals by stockholders at annual and special meetings of stockholders.

The Board is not aware of any pending takeover or other transactions that would result in a change in control of the Company, and the proposal was not adopted to thwart any such efforts.

Accounting Matters

If the reverse stock split is implemented, the par value per share of our common stock will remain unchanged at \$0.01 per share after the reverse stock split. As a result of the reverse stock split, at the effective time of the reverse stock split, the stated capital on our balance sheet attributable to the common stock, which consists of the par value per share of the common stock multiplied by the aggregate number of shares of the common stock issued and outstanding, will be reduced in proportion to the reverse stock split ratio. Correspondingly, our additional paid-in capital account, which consists of the difference between our stated capital and the aggregate amount paid to us upon issuance of all currently outstanding shares of common stock, will be credited with the amount by which the stated capital is reduced. Our stockholders' equity, in the aggregate, will remain unchanged. In addition, the per share net income or loss of our common stock, for all periods, will be restated because there will be fewer outstanding shares of common stock.

No Going Private Transaction

Notwithstanding the decrease in the number of outstanding shares following the reverse stock split, this transaction is not intended to be the first step in a "going private transaction," within the meaning of Rule 13e-3 of the Exchange Act, and will not produce, either directly or indirectly, any of the effects described in paragraph (a)(3)(ii) of Rule 13e-3 of the Exchange Act.

Effective Date

If the reverse stock split is implemented, we will file a Certificate of Amendment of our Third Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware. The reverse stock split will become effective upon the filing of the Certificate of Amendment. No further action on the part of stockholders would be required to either effect or abandon the reverse stock split. If the Board does not implement the reverse stock split on or prior to October 12, 2017, the one-year anniversary of the date of the Special Meeting, the authority granted in this proposal to implement the reverse stock split will terminate. The Board reserves its right to elect not to proceed with the reverse stock split, and to abandon the reverse stock split in its entirety, if it determines, in its sole discretion, that this proposal is no longer in the best interests of our stockholders.

Mechanics of the Reverse Stock Split

Exchange of Stock Certificates

If the reverse stock split is implemented, each certificate representing pre-reverse split shares will, until surrendered and exchanged as described below, for all corporate purposes, be deemed to represent, respectively, only the number of post-reverse stock split shares.

Shortly after the reverse stock split becomes effective, stockholders will be notified and offered the opportunity at their own expense to surrender their current certificates to our transfer agent in accordance with the procedures to be set forth in a letter of transmittal to be sent by us or our transfer agent in exchange for the issuance of new certificates reflecting the reverse stock split. In connection with the reverse stock split, the CUSIP number for the common stock will change from its current CUSIP number. This new CUSIP number will appear on any new stock certificates issued representing post-reverse stock split shares.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATE(S) AND SHOULD NOT SUBMIT ANY STOCK CERTIFICATE(S) UNTIL REQUESTED TO DO SO.

Effect on Registered "Book-entry" Holders of Common Stock

Holders of common stock may hold some or all of their common stock electronically in book-entry form ("street name"). These stockholders do not have stock certificates evidencing their ownership. They are, however, provided with a statement reflecting the number of shares of common stock registered in their accounts. If the reverse stock split is implemented and you hold registered common stock in book-entry form, you do not need to take any action to receive your post-reverse stock split shares or cash payment in lieu of any fractional share interest, if applicable. If you are entitled to post-reverse stock split shares, a transaction statement will automatically be sent to your address of record indicating the number of shares you hold. If you are entitled to a payment in lieu of any fractional share interest, a check will be mailed to you at your registered address as soon as practicable after our transfer agent completes the aggregation and sale described below in "—Fractional Shares."

Effect on Registered Certificated Common Stockholders

Some of our stockholders hold their shares of common stock in certificate form or a combination of certificate and book-entry form. If the reverse stock split is implemented and any of your shares are held in certificate form, you will receive a transmittal letter from us or our transfer agent as soon as practicable after the effective date of the reverse stock split. The letter of transmittal will contain instructions on how to surrender your certificate(s) representing your pre-reverse common stock split shares to the transfer agent. Upon receipt of your pre-reverse stock split certificate(s), you will be issued the appropriate number of shares electronically in book-entry form, and if you are entitled to a payment in lieu of any fractional share interest, payment will be made as described below under "—Fractional Shares." No new shares in book-entry form will be issued and no payment in lieu of any fractional share interest, payment in lieu of any fractional share interest, and no payment in lieu of any fractional share interest. At any time after receipt of your book-entry statement, you may request a stock certificate representing your ownership interest.

Fractional Shares

If the reverse stock split is implemented, no fractional shares will be issued in connection with the reverse stock split. Instead, stockholders who would otherwise hold fractional shares because the number of shares of common stock they hold before the reverse stock split is not evenly divisible by the split ratio ultimately selected by the Board will receive cash (without interest) in lieu of such fractional shares in an amount equal to the product obtained by multiplying (i) the closing price of our shares of common stock on the day immediately preceding the effective date of the reverse split, as reported on the Nasdaq Capital Market (or, if the closing price of our common stock is not then reported on the Nasdaq Capital Market, then the fair market value of our shares of common stock as determined by the Board) by (ii) the number of shares of our common stock held by such stockholder that would otherwise have been exchanged for such fractional share interest. Stockholders who own their shares in certificated form will receive such cash payment in lieu of fractional shares following the surrender of their pre-reverse split certificate(s) for post-reverse stock split shares. The ownership of a fractional share interest will not give the holder any voting, dividend or other rights, except to receive the above-described cash payment.

Dissenters' or Appraisal Rights

Under the General Corporation Law of the State of Delaware, our stockholders are not entitled to any dissenters' or appraisal rights with respect to the reverse stock split, and we will not independently provide stockholders with any such right.

U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following summary describes certain material U.S. federal income tax consequences of the reverse stock split to holders of our common stock.

Unless otherwise specifically indicated herein, this summary addresses the U.S. federal income tax consequences only to a beneficial owner of our common stock that is: (i) a citizen or individual resident of the United States, (ii) a corporation (including an entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the U.S. or of a political subdivision thereof (including the District of Columbia), (iii) an estate whose income is subject to U.S. federal income taxation, regardless of its source, or (iv) any trust if: (a) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (b) it has a valid election in place to be treated as a U.S. person (each, a "U.S. Holder"). This summary does not address any state, local, foreign, or other tax consequences, nor does it address all of the tax consequences that may be relevant to a particular stockholder in light of their circumstances, including tax consequences arising to stockholders subject to special rules, such as persons who acquired shares of our common stock pursuant to employee stock options or otherwise as compensation, certain financial institutions, tax-exempt entities, regulated investment companies, insurance companies, partnerships or other pass-through entities, U.S. expatriates, persons subject to the alternative minimum tax, traders in securities that elect to use a mark-to-market method of accounting, individual retirement accounts or tax-deferred accounts, dealers in securities, commodities or currencies, persons holding shares in connection with a hedging transaction, "straddle," conversion transaction or a synthetic security or other integrated transaction, stockholders whose "functional currency" is not the U.S. dollar, and persons that do not hold our common stock as "capital assets" (generally, property held for investment).

This summary is based on current law, including the Internal Revenue Code of 1986, as amended (the "Code"), administrative pronouncements, judicial decisions, existing and proposed Treasury Regulations, and interpretations of the foregoing, all as in effect as of the date hereof. All of the foregoing authorities are subject to change (possibly with retroactive effect) and any such change may result in U.S. federal income tax consequences to a stockholder that are materially different from those described below. In addition, we have not sought, and will not seek, an opinion of counsel or a ruling from the Internal Revenue Service (the "IRS") regarding the U.S. federal income tax consequences of the reverse stock split, and there can be no assurance the IRS will not challenge the statements and conclusions set forth in this discussion or that a court would not sustain any such challenge.

Tax Consequences of the Reverse Stock Split Generally

The reverse stock split is intended to constitute a "reorganization" within the meaning of Section 368 of the Code. Accordingly, a U.S. Holder generally will not recognize gain or loss for U.S. federal income tax purposes on the

reverse stock split (except with respect to any cash received in lieu of a fractional share as described below). The aggregate tax basis of the post-reverse split shares received will be the same as the aggregate tax basis of the pre-reverse split shares exchanged therefore (excluding any portion of the holder's basis allocated to fractional share interests), and the holding period(s) of the post-reverse split shares received will include the U.S. Holder's holding period(s) for the pre-reverse split shares exchanged. The Company will not recognize any gain or loss as a result of the reverse stock split.

Cash Received Instead of a Fractional Share

A U.S. Holder who receives cash for fractional shares should generally recognize gain or loss, as the case may be, for U.S. federal income tax purposes measured by the difference between the amount of cash received and the portion of the tax basis of the pre-reverse split shares allocated to the fractional share interest. Such gain or loss will be capital gain or loss and will generally be long-term capital gain or loss to the extent such U.S. Holder's holding period exceeds 12 months. The deductibility of capital losses may be subject to certain limitations.

Backup Withholding

A non-corporate U.S. Holder may be subject to backup withholding at a 28% rate on cash payments received pursuant to the reverse stock split unless such U.S. Holder provides a correct taxpayer identification number to its broker or to the Company and otherwise complies with applicable requirements of the backup withholding rules. Backup withholding is not an additional tax. Rather, any amount withheld under these rules will be creditable against the U.S. Holder's U.S. federal income tax liability, provided the required information is furnished to the IRS.

IRS Circular 230 Disclosure: To ensure compliance with requirements imposed by the U.S. Internal Revenue Service, we inform you that any tax advice contained in this proxy statement was not intended or written to be used, and cannot be used, by any taxpayer for the purpose of avoiding tax-related penalties under the Code. The tax advice contained in this proxy statement was written to support the promotion or marketing of the transactions and matters addressed by the proxy statement. Each taxpayer should seek advice based on the taxpayer's particular circumstances from an independent tax advisor.

PLEASE CONSULT YOUR OWN TAX ADVISOR REGARDING THE FEDERAL, STATE, LOCAL, AND FOREIGN INCOME AND OTHER TAX CONSEQUENCES TO YOU OF THE REVERSE STOCK SPLIT IN YOUR PARTICULAR CIRCUMSTANCES.

Vote Required

The affirmative vote of a majority of the votes cast at the Special Meeting by the holders of our common stock and Series A-1 Preferred Stock, voting together as a single class (with each one share of Series A-1 Preferred Stock being entitled to 0.93 votes), is required to approve the authorization of the Board to, in its discretion, amend our Third Amended and Restated Certificate of Incorporation to effect a reverse stock split of our common stock at a ratio of between one-for-ten to one-for-thirty, such ratio to be determined by the Board.

The Board of Directors recommends that you vote "FOR" Proposal One.

SUBMISSION OF STOCKHOLDER PROPOSALS

Pursuant to our Bylaws, stockholder proposals submitted for presentation at our 2017 annual meeting of stockholders, including nominations for common stock directors, must be received by our Corporate Secretary at c/o Transgenomic, Inc., 12325 Emmet Street, Omaha, NE 68164 no later than 35 days prior to the date of our 2017 annual meeting of stockholders. If less than 35 days' notice of our 2017 annual meeting of stockholders is given, then stockholder proposals must be received by our Corporate Secretary no later than 7 days after the mailing date of the notice of our 2017 annual meeting of stockholders. Any stockholder nomination for a Common Stock Director must set forth the name, age, address and principal occupation of the person nominated, the number of shares of our common stock owned by the nominee and the nominating stockholder and other information required to be disclosed about the nominee under federal proxy solicitation rules.

In order to be included in our proxy statement relating to our 2017 annual meeting of stockholders, stockholder proposals must be submitted in writing by December 30, 2016 to our Corporate Secretary at c/o Transgenomic, Inc., 12325 Emmet Street, Omaha, NE 68164. The inclusion of any such proposal in our proxy materials will be subject to the requirements of the proxy rules adopted under the Exchange Act.

IMPORTANT NOTICE REGARDING DELIVERY OF STOCKHOLDER DOCUMENTS

We are sending only one Proxy Statement to "street name" stockholders who share a single address unless we received contrary instructions from any stockholder at that address. This practice, known as "householding," is designed to reduce our printing and postage costs. However, if a stockholder is residing at such an address and wishes to receive a separate proxy statement in the future, such stockholder may request them by calling our Corporate Secretary at (402) 452-5400, or by submitting a request in writing to our Corporate Secretary, c/o Transgenomic, Inc., 12325 Emmet Street, Omaha, NE 68164. If a stockholder is receiving multiple copies of our proxy statement, such stockholder can request householding by contacting the Corporate Secretary in the same manner described above. In addition, we will promptly deliver, upon written or oral request to the address or telephone number above, a separate copy of the Proxy Statement to a stockholder at a shared address to which a single copy of the documents was delivered.

OTHER MATTERS

Management does not currently intend to bring any matter before the Special Meeting other than those disclosed in the Notice of Special Meeting of Stockholders, and it does not know of any business which persons, other than the management, intend to present at the meeting. The enclosed proxy for the Special Meeting confers discretionary authority on the Board to vote on any matter proposed by stockholders for consideration at the Special Meeting.

We will bear the cost of soliciting proxies for the Special Meeting. To the extent necessary, proxies may be solicited by our directors, officers and employees, but these persons will not receive any additional compensation for such solicitation. We will reimburse brokerage firms, banks and other custodians, nominees and fiduciaries for reasonable expenses incurred by them in sending proxy materials to the beneficial owners of our common stock. In addition to solicitation by mail, we will supply banks, brokers, dealers and other custodian nominees and fiduciaries with proxy materials to enable them to send a copy of such materials by mail to each beneficial owner of our common stock that they hold of record and will, upon request, reimburse them for their reasonable expenses in so doing.

Stockholders may communicate with any director, including the Chairman of the Board and the chairman of any committee of the Board, by sending a letter to the attention of the appropriate person (which may be marked as confidential) addressed to our Corporate Secretary at our home office. All communications received by the Corporate Secretary will be forwarded to the appropriate directors. In addition, it is the policy of the Board that, whenever possible, directors attend, and be available to discuss stockholder concerns at, the meetings of our stockholders. Only Paul Kinnon participated in our 2016 Annual Meeting.

By Order of the Board of Directors

/s/ PAUL KINNON Paul Kinnon President, Chief Executive Officer and Interim Chief Financial Officer

Omaha, Nebraska

[], 2016

18

Appendix A

CERTIFICATE OF AMENDMENT

OF THE

THIRD AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION OF

TRANSGENOMIC, INC.

TRANSGENOMIC, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "*DGCL*"), does hereby certify:

FIRST: The name of the Corporation is TRANSGENOMIC, INC. (the "Corporation").

SECOND: The Third Amended and Restated Certificate of Incorporation of the Corporation was filed with the office of the Secretary of State of the State of Delaware on October 26, 2005 (the "*Restated Certificate*")

THIRD: This Certificate of Amendment amends certain provisions of the Restated Certificate, and has been duly adopted by the Board of Directors of the Corporation acting in accordance with the provisions of Section 242 of the DGCL, and further adopted in accordance with the provisions of Sections 211 and 242 of the DGCL by the stockholders of the Corporation.

FOURTH: A third paragraph shall be added to Article IV, Section 4.1 of the Restated Certificate, which shall read as follows:

"Effective at [___].m. on [____], 20[__], each [____] shares of Common Stock issued and outstanding at such time shall be combined into one (1) share of Common Stock, par value \$0.01 per share (the "*Second Reverse Stock Split*"). No fractional share shall be issued upon the Second Reverse Stock Split. All shares of Common Stock (including fractions thereof) issuable upon the Second Reverse Stock Split to a given holder shall be aggregated for purposes of determining whether the Second Reverse Stock Split would result in the issuance of any fractional share.

If, after the aforementioned aggregation, the Reverse Stock Split would result in the issuance of a fraction of a share of Common Stock, the Corporation shall, in lieu of issuing any such fractional share, pay to a holder of a fractional share interest an amount in cash equal to the product obtained by multiplying (i) the closing price of the shares of Common Stock on the day immediately preceding the effective date of the Second Reverse Stock Split, as reported on the Nasdaq Capital Market (or, if the closing price of the Common Stock is not then reported on the Nasdaq Capital Market, then the fair market value of the shares of Common Stock as determined by the Board of Directors of the Corporation) by (ii) the number of shares of Common Stock held by such stockholder that would otherwise have been exchanged for such fractional share interests."

IN WITNESS WHEREOF, TRANSGENOMIC, INC. has caused this Certificate of Amendment to be signed by its [___] as of [___], 20[____].

TRANSGENOMIC, INC.

By:

Name: Title:

¹Final split ratio, within a range of 1-for-10 to 1-for-30 to be determined by the Board of Directors pursuant to authority granted by stockholders, as described in the accompanying proxy statement.

A-1