TRANSGENOMIC INC Form SC 13D January 11, 2011

#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13D (Amendment No. \_\_)\* Under the Securities Exchange Act of 1934

TRANSGENOMIC, INC. (Name of Issuer)

Common Stock (Title of Class of Securities)

89365K206 (CUSIP Number)

> Third Security, LLC 1881 Grove Avenue Radford, Virginia 24141 Attention: Marcus E. Smith, Esq. (540) 633-7900 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

Copy to: John Owen Gwathmey, Esq. David I. Meyers, Esq. Troutman Sanders LLP Troutman Sanders Building 1001 Haxall Point Richmond, Virginia 23219 (804) 697-1239

December 29, 2010 (Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box o.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No.	89365K206	)	Page 2 of 11			
1			TING PERSONS ION NOS. OF ABOVE PERSONS			
	Randal J. K	irk				
2		HE APPRO	OPRIATE BOX IF A MEMBER OF GROUP			
	(a) o					
2	(b) x					
3	SEC USE C	ONLY				
4	SOURCE OF FUNDS					
	PF					
5						
6	PURSUANT TO ITEM 2(d) OR 2(e)					
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
	United States					
		7	SOLE VOTING POWER			
			0			
NUMBE		0				
SHARES BENEFICIALLY OWNED BY		8	SHARED VOTING POWER			
			15,517,228			
EACI	H					
REPORT		9	SOLE DISPOSITIVE POWER			
PERSON	WITH		0			
			0			
		10	SHARED DISPOSITIVE POWER 15,517,228			
11	AGGREGA	TE AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	15,517,228					
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES					
	CERTAIN SHARES					
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 24%					
14	24% TYPE OF REPORTING PERSON					

IN

0

0

CUSIP No.	89365K206		Page 3 of 11			
1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS					
	THIRD SECURITY SENIOR STAFF 2008 LLC I.R.S. IDENTIFICATION NO.: 26-1868899					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF GROUP (a) o (b) x					
3	SEC USE ONLY					
4	WC					
5						
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
	Virginia					
		7	SOLE VOTING POWER			
NUMBEI	ES IALLY D BY H FING		0			
SHAR		8	SHARED VOTING POWER			
BENEFICI OWNED EACH REPORT PERSON			6,206,892			
		9	SOLE DISPOSITIVE POWER			
			0			
		10	SHARED DISPOSITIVE POWER			
11		TE AMO	6,206,892 UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
12	6,206,892 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES					
12	CERTAIN S	SHARES	S REPRESENTED BY A MOUNT IN ROW (11)			

- PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
  9.58%
- 14 TYPE OF REPORTING PERSON OO – limited liability company

0

0

Page 4 of 11

1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS				
	THIRD SECURITY STAFF 2010 LLC I.R.S. IDENTIFICATION NO.: 27-3853493				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF GROUP (a) o				
3	(b) x SEC USE ONLY				
4	SOURCE OF FUNDS				
5 6	WC CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) CITIZENSHIP OR PLACE OF ORGANIZATION				
	Virginia				
		7	SOLE VOTING POWER		
NUMBER OF SHARES BENEFICIALLY			0		
		8	SHARED VOTING POWER		
OWNED BY			6,206,892		
EACH REPORTING PERSON WITH		9	SOLE DISPOSITIVE POWER		
			0		

10 SHARED DISPOSITIVE POWER

6,206,892

- 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 6,206,892
- 12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
- PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)9.58%
- 14 TYPE OF REPORTING PERSON OO – limited liability company

CUSIP No. 89365K206

0

0

CUSIP No. 89365K206	Page 5 of 11
---------------------	--------------

Item 1.

Security and Issuer.

The class of equity securities to which this Statement on Schedule 13D (the "Statement"), relates is the common stock, par value \$0.01 per share (the "Common Stock"), of Transgenomic, Inc., a Delaware corporation (the "Company"), whose principal executive offices are located at 12325 Emmet Street, Omaha, Nebraska 68164.

Item 2.

#### Identity and Background.

This Statement is being filed on behalf of Mr. Randal J. Kirk ("Mr. Kirk"), Third Security Senior Staff 2008 LLC, a Virginia limited liability company that is controlled by Mr. Kirk ("Senior Staff"), Third Security Staff 2010 LLC, a Virginia limited liability company that is controlled by Mr. Kirk ("Staff") and Third Security Incentive 2010 LLC, a Virginia limited liability company that is controlled by Mr. Kirk ("Incentive" and, together with Mr. Kirk, Senior Staff and Staff, the "Reporting Persons").

(a)-(c) The address of the principal business office of each of the Reporting Persons is The Governor Tyler, 1881 Grove Avenue, Radford, Virginia 24141. The present principal occupation/employment of Mr. Kirk is as the Senior Managing Director of Third Security, LLC, an investment management firm founded by Mr. Kirk. The principal business of each of Senior Staff, Staff and Incentive is investment.

(d)-(e) During the last five years, none of the Reporting Persons or, to the best of the Reporting Persons' knowledge, any of the managers of the Reporting Persons, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding is or was subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Mr. Kirk is a citizen of the United States. Senior Staff, Staff and Incentive are entities organized under the laws of the Commonwealth of Virginia.

Item 3. Source and Amount of Funds or Other Consideration.

On December 29, 2010, the Company entered into a Series A Convertible Preferred Stock Purchase Agreement (the "Purchase Agreement") with Senior Staff, Staff and Incentive (collectively, the "Investors"), pursuant to which the Company issued to the Investors in a private placement (i) 2,586,205 shares (the "Preferred Shares") of Series A Convertible Preferred Stock (the "Preferred Stock"), and (ii) warrants (collectively, the "Warrants"), to purchase an aggregate of up to 1,293,102 shares of Preferred Stock (the "Warrant Shares"), at an initial exercise price of \$2.32 per share, which is subject to adjustment as set forth in the Warrants. The total aggregate purchase price was \$6,000,000 cash.

The purchase price was funded 40% by Senior Staff, 40% by Staff and 20% by Incentive.

#### CUSIP No. 89365K206

Page 6 of 11

The Preferred Shares issuable pursuant to the Purchase Agreement and upon exercise of the Warrants are convertible into shares of the Common Stock at a conversion price of \$0.58 per share, for an aggregate of 15,517,228 shares of Common Stock (the "Conversion Shares"), which represents approximately 24% of the issued and outstanding shares of Common Stock. Upon full exercise of the Warrants, the Company will receive an additional approximately \$3.0 million from the Investors.

Pursuant to the Company's Certificate of Designation of Series A Convertible Preferred Stock, effective December 28, 2010 (the "Certificate of Designation"), and as a result of the acquisition of the Shares pursuant to the terms of the Purchase Agreement, and as more fully described below, the Investors also have the right to collectively designate two persons to serve as members of the Company's Board of Directors (the "Board").

The foregoing references to and description of the Purchase Agreement, the Warrants and the Certificate of Designation do not purport to be complete and are subject to, and are qualified in their entirety by reference to, the full text of the Purchase Agreement, the Warrants and the Certificate of Designation, which are included as Exhibits 1, 2 and 3 hereto, respectively, and are incorporated by reference to this Item 3.

Item 4.

#### Purpose of Transaction.

The information set forth in Items 3 and 6 is incorporated herein by reference.

The Reporting Persons acquired the Shares and Warrants for investment purposes. The Reporting Persons may, from time to time, depending upon market conditions and other factors deemed relevant by the Reporting Persons, acquire shares of Common Stock, Preferred Stock or Warrants of the Company, outside of those contemplated by the Purchase Agreement. The Reporting Persons reserve the right to, and may in the future choose to, change their purpose with respect to the investment and take such actions as they deem appropriate in light of the circumstances including, without limitation, to dispose of, in the open market, in a privately negotiated transaction, by transfer, by exchange or by gift, all or a portion of the shares of Common Stock or other securities of the Company which they now own or may hereafter acquire. Any decision of the Reporting Persons to increase their holdings in Common Stock or securities convertible into Common Stock, the terms and conditions related to their purchase and sale, the prospects and profitability of the Company, other business and investment alternatives of the Reporting Persons, tax considerations and general economic and market conditions. At any time, the Reporting Persons, or any of them, may determine to dispose of some or all of their holdings of Common Stock depending on those and other considerations.

## CUSIP No. 89365K206 Page 7 of 11

At the date of this Statement, the Reporting Persons do have plans or proposals which would result in:

(a) The acquisition of additional securities of the Company.

In addition to the Preferred Shares, the Purchase Agreement provides for Warrants to purchase the Warrant Shares. Furthermore, if the Preferred Shares issuable pursuant to the Purchase Agreement and the Warrant Shares issued upon exercise of the Warrants are converted into shares of Common Stock, at a conversion price of \$0.58 per share, the Investors could own approximately 15,517,228 shares of Common Stock.

(d) A change in the present board of directors of the Company.

Pursuant to the Certificate of Designation, holders of the Preferred Stock are be entitled, as a separate voting group, at each annual or special election of directors, to elect two directors to the Board (each a "Series A Director"). In addition, pursuant to the terms of the Purchase Agreement, the Series A Directors chosen by the Investors were elected to the Board as of the closing of the transaction under the Purchase Agreement.

Except as described above, at the date of this Statement, each of the Reporting Persons have no present plans or proposals which would result in:

(a) The acquisition by any person of additional securities of the Company, or the disposition of securities of the Company;

(b) An extraordinary corporate transaction involving the Company or any of its subsidiaries;

(c) A sale or transfer of a material amount of assets of the Company or any of its subsidiaries;

(d) Any change in the present board of directors or management of the Company, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;

(e) Any material change in the present capitalization or dividend policy of the Company;

(f) Any other material change in the Company's business or corporate structure, including but not limited to, if the Company is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by section 13 of the Investment Company Act of 1940;

(g) Changes in the Company's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Company by any person;

(h) Causing a class of securities of the Company to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;

(i) A class of equity securities of the Company becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or

(j) Any action similar to any of those actions enumerated above.

## CUSIP No. 89365K206 Page 8 of 11

Item 5. Interest in Securities of the Issuer.

The information contained on the cover pages to this Statement and the information set forth or incorporated in Items 2, 3, 4 and 6 is incorporated herein by reference.

(a) and (b) See items 11 and 13 of the cover pages to this Statement for the aggregate number of shares and percentage of issued and outstanding shares of Preferred Stock of the Company owned by the Reporting Persons. The percentage ownership is calculated based on 49,289,672 shares of Common Stock issued and outstanding as reported on the Company's Quarterly Report on Form 10-Q filed with the SEC on November 15, 2010, increased by the aggregate number of shares of Common Stock into which the aggregate number of shares of Preferred Stock issued upon the execution of the Purchase Agreement (2,586,205 shares of Preferred Stock convertible into 10,344,820 shares of Common Stock at a conversion price of \$0.58 per share) and the aggregate number of shares of Preferred Stock issuable upon exercise of the Warrants (1,293,102 shares of Preferred Stock convertible into 5,172,408 shares of Common Stock at a conversion price of \$0.58 per share) are convertible at a conversion price of \$0.58 per share (15,517,228 shares of Common Stock).

							Sole	Shared
	Amount of			Sole	Shared		Power to	Power to
	Common			Power	Power to		Dispose or	Dispose or
Stock				to Vote or	Vote or		to	to
	Beneficially	Percent		Direct	Direct		Direct the	Direct the
Reporting Person	Owned(1)	of Class		the Vote	the Vote		Disposition	Disposition
Third Security Senior Staff								
2008 LLC	6,206,892	9.58	%	—	9.58	%		6,206,892
Third Security Staff 2010 LLC	6,206,892	9.58	%		9.58	%		6,206,892
Third Security Incentive 2010								
LLC	3,103,444	4.79	%		4.79	%		3,103,444

(1) Assumes the full conversion of the Preferred Stock and the Warrants into Common Stock as described above.

Mr. Kirk could be deemed to have indirect beneficial ownership of the shares of Common Stock issuable upon conversion of the Series A Preferred Stock and the Warrants directly beneficially owned by the Investors.

(c) Except as set forth in this Item 5, none of the Reporting Persons have engaged in any transactions in the Company's Common Stock in the past 60 days.

(d)-(e)

Not Applicable

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

The Reporting Persons' response to Item 4 is incorporated herein by reference.

**Registration Rights Agreement** 

The following is a summary of certain terms and conditions of the Registration Rights Agreement which is attached hereto as Exhibit 4.

In connection with the transaction, the Company and the Investors entered into a registration rights agreement (the "Registration Rights Agreement"), pursuant to which the Company agreed to provide demand, Form S-3 and piggy-back registration rights with respect to the Shares and Warrant Shares, and the Conversion Shares, if such shares are issued (collectively, the "Registrable Securities"), as provided in the Registration Rights Agreement. The Company's obligations under the Registration Rights Agreement terminate after the earlier of (i) five years following the date of the transaction and (ii) as to each holder of Registerable Securities, the date on which such holder can sell all shares of its Registrable Securities without restriction pursuant to Rule 144 or any successor provision thereto, without regard to volume limitations or manner of sale.

CUSIP No. 89365K206 Page 9 of 11

Except as set forth herein, there are no contracts, arrangements, understandings or relationships (legal or otherwise), including, but not limited to, transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, between the Reporting Persons, and any other person, with respect to any securities of the Company, including any securities pledged or otherwise subject to a contingency the occurrence of which would give another person voting power or investment power over such securities other than standard default and similar provisions contained in loan agreements.

Item 7.

Material to be Filed as Exhibits.

Exhibit Series A Convertible Preferred Stock Purchase Agreement, dated December 29, 2010, by and among

1 Transgenomic, Inc. (the "Company"), Third Security Senior Staff 2008 LLC, Third Security Staff 2010 LLC, and Third Security Incentive 2010 LLC (filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Form of Warrant (filed as Exhibit 4.2 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Certificate of Designation of Series A Convertible Preferred Stock dated as of December 28, 2010 (filed as

3 Exhibit 3.1 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Registration Rights Agreement, dated December 29, 2010, by and among the Company, Third Security Senior

4 Staff 2008 LLC, Third Security Staff 2010 LLC, and Third Security Incentive 2010 LLC (filed as Exhibit 4.3 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Joint Filing Agreement, dated as of January 10, 2011, by and among Randal J. Kirk, Third Security Senior
 Staff 2008 LLC, Third Security Staff 2010 LLC, and Third Security Incentive 2010 LLC

CUSIP No. 89365K206

Page 10 of 11

#### SIGNATURES

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: January 10, 2011

### /s/ Randal J. Kirk Randal J. Kirk

#### THIRD SECURITY SENIOR STAFF 2008 LLC

By:

/s/ Randal J. Kirk Randal J. Kirk Manager

### THIRD SECURITY STAFF 2010 LLC

By:

/s/ Randal J. Kirk Randal J. Kirk Manager

#### THIRD SECURITY INCENTIVE 2010 LLC

By:

/s/ Randal J. Kirk Randal J. Kirk Manager

### EXHIBIT INDEX

Exhibit Series A Convertible Preferred Stock Purchase Agreement, dated December 29, 2010, by and among

1 Transgenomic, Inc. (the "Company"), Third Security Senior Staff 2008 LLC, Third Security Staff 2010 LLC, and Third Security Incentive 2010 LLC (filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Form of Warrant (filed as Exhibit 4.2 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Certificate of Designation of Series A Convertible Preferred Stock dated as of December 28, 2010 (filed as

3 Exhibit 3.1 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Registration Rights Agreement, dated December 29, 2010, by and among the Company, Third Security Senior

4 Staff 2008 LLC, Third Security Staff 2010 LLC, and Third Security Incentive 2010 LLC (filed as Exhibit 4.3 to the Company's Current Report on Form 8-K, dated December 28, 2010, and incorporated herein by reference)

Exhibit Joint Filing Agreement, dated as of January 10, 2011, by and among Randal J. Kirk, Third Security Senior
 Staff 2008 LLC, Third Security Staff 2010 LLC, and Third Security Incentive 2010 LLC