TRANSGENOMIC INC
Form 10-K
April 14, 2016

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

FORM 10-K
(Mark One)

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2015
OR

.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to
Commission File Number 000-30975

TRANSGENOMIC, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware	91-1789357
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification Number)
12325 Emmet Street Omaha, NE	68164
(Address of Principal Executive Offices)	(Zip Code)

(402) 452-5400
(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange On Which Registered
Common Stock, par value $0.01 per share	The NASDAQ Capital Market

Securities registered pursuant to Section 12(g) of the Act:
None
(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes No X

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.
Yes No X

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes X No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes X No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form10-K ý

1

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

Large Accelerated Filer ¨ Accelerated Filer ¨
Non-Accelerated Filer ¨ Smaller Reporting Company ý
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).
Yes No X
The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant based on the last reported closing price per share of Common Stock as reported on the Nasdaq Capital Market on the last business day of the registrant’s most recently completed second quarter was approximately $19.3 million.
At March 31, 2016, the registrant had 20,695,870 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s Definitive Proxy Statement for its 2016 Annual Stockholders’ Meeting are incorporated by reference into Part III of this Annual Report on Form 10-K, to be filed within 120 days of the registrant’s fiscal year ended December 31, 2015.

TRANSGENOMIC, INC.
Index to Form 10-K for the Fiscal Year Ended December 31, 2015

This Annual Report on Form 10-K references the following registered trademarks which are the property of Transgenomic, Inc.: Transgenomic, WAVE, SURVEYOR, FAMILION and ScoliScore. The following trademarks are the property of Transgenomic, Inc.: Advancing Personalized Medicine, the helix logo, ProtocolWriter and Navigator. This report may also refer to trade names and trademarks of other organizations.

PART I

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Annual Report"), including Management's Discussion & Analysis of Financial Condition and Results of Operations, contains forward-looking statements. These statements are based on management's current views, assumptions or beliefs of future events and financial performance and are subject to uncertainty and changes in circumstances. Readers of this report should understand that these statements are not guarantees of performance or results. Many factors could affect our actual financial results and cause them to vary materially from the expectations contained in the forward-looking statements. These factors include, among other things: our expected revenue, income (loss), receivables, operating expenses, supplier pricing, availability and prices of raw materials, insurance reimbursements, product pricing, foreign currency exchange rates, sources of funding operations and acquisitions, our ability to raise funds, sufficiency of available liquidity, future interest costs, future economic circumstances, business strategy, industry conditions and key trends, our ability to execute our operating plans, the success of our cost savings initiatives, competitive environment and related market conditions, expected financial and other benefits from our organizational restructuring activities, actions of governments and regulatory factors affecting our business, retaining key employees and other risks as described in our reports filed with the Securities and Exchange Commission (the "SEC"). In some cases these statements are identifiable through the use of words such as "anticipate," "believe," "estimate," "expect," "intend," "plan," "project," "target," "can," "could," "may," "shou the negative of such terms and other similar expressions.

You are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements we make are not guarantees of future performance and are subject to various assumptions, risks and other factors that could cause actual results to differ materially from those suggested by these forward-looking statements. Actual results may differ materially from those suggested by these forward-looking statements for a number of reasons, including those described in Item 1A, "Risk Factors," and other factors identified by cautionary language used elsewhere in this Annual Report.

We expressly disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Reverse Stock Split

On January 15, 2014, our Board of Directors approved a reverse split of our common stock, par value $0.01, at a ratio of one-for-twelve. This reverse stock split became effective on January 27, 2014 and, unless otherwise indicated, all share amounts, per share data, share prices, exercise prices and conversion rates set forth in this Annual Report have, where applicable, been adjusted retroactively to reflect this reverse stock split.

The following discussion should be read together with our financial statements and related notes contained in this Annual Report. Results for the year ended December 31, 2015 are not necessarily indicative of results that may be attained in the future.

Item 1. Our Business

Transgenomic, Inc. ("we", "us", "our", the "Company" or "Transgenomic") is a biotechnology company advancing personalize medicine for the detection and treatment of cancer and inherited diseases through our proprietary molecular technologies and clinical and research services. A key goal is to bring our Multiplexed ICE COLD-PCR ("MX-ICP") product to the clinical market through strategic partnerships and licensing agreements, enabling the use of blood and other bodily fluids for more effective and patient-friendly diagnosis, monitoring and treatment of cancer.

MX-ICP is technology proprietary to Transgenomic. It is a reagent that improves the ability to detect genetic mutations by 100 - 400 fold over existing technologies. This technology has been validated internally on all currently available sequencing platforms, including Sanger, Next Gen Sequencing and Digital PCR. By enhancing the level of

detection of genetic mutations and suppressing the normal, or wild-type DNA, several benefits are provided. It is generally understood that most current technologies are unable to consistently identify mutations that occur in less than approximately 5% of a sample. However, many mutations found at much lower levels, even as low as 0.01%, are known to be clinically relevant and can have significant consequences to a patient: both in terms of how they will respond to a given drug or treatment and how a given tumor is likely to change over time. More importantly, in our view, is the ability to significantly improve the level of detection while using blood, saliva and even urine as a source for DNA, rather than depending on painful, expensive and potentially dangerous tumor biopsies.

We believe that this is an important advancement in patient care with respect to cancer detection, treatment and monitoring and can result in significant cost savings for the healthcare system by replacing invasive procedures with the simple collection of blood or other bodily fluids. By broadening the types of samples that can be used for testing and allowing all sequencing platforms to provide improved identification of low level mutations, MX-ICP has the potential to make testing more readily available, more patient friendly, enable genetic monitoring of disease progression, effectively guide treatment protocols, and reduce the overall cost of diagnosis and monitoring while significantly improving patient outcomes.

Historically, our operations were organized and reviewed by management along our major product lines and presented in two business segments: Laboratory Services and Genetic Assays and Platforms. Beginning with the quarter ended September 30, 2015, our operations are now organized as one business segment, our Laboratory Services segment, and during the fourth quarter of 2015, we began including a portion of our Laboratory Services segment as discontinued operations.

Our laboratory in Omaha, Nebraska is focused on providing genetic analytical services related to oncology and pharmacogenomics research services supporting Phase II and Phase III clinical trials conducted by pharmaceutical and biotechnology companies. Our laboratory employs a variety of genomic testing service technologies, including our proprietary MX-ICP technology. ICE COLD-PCR is a proprietary ultra-high sensitivity platform technology with breakthrough potential to enable wide adoption of personalized, precision medicine in cancer and other diseases. It can be run in any laboratory that contains standard PCR systems. MX-ICP enables detection of multiple known and unknown mutations from virtually any sample type, including tissue biopsies, blood, urine, saliva, cell-free DNA (“cfDNA”) and circulating tumor cells (“CTCs”) at levels greater than 1,000-fold higher than standard DNA sequencing techniques. It is easy to implement and use within existing workflows. Our laboratory in Omaha is certified under the Clinical Laboratory Improvement Amendment (“CLIA”) as a high complexity laboratory and is accredited by the College of American Pathologists.

Our consolidated balance sheets, statements of operations and statements of cash flows for all periods presented reflect our former Genetic Assays and Platforms activities and Patient Testing business as discontinued operations (See Note 3 - “Discontinued Operations”).

Business Strategy

Our primary objective is to commercialize MX-ICP for the clinical diagnostics market through strategic licensing agreements. MX-ICP facilitates the use of blood and other bodily fluids for the effective and efficient diagnosis and treatment of cancer. It does this by enhancing the level of detection of mutant DNA by 100 - 400 fold. In tumors, mutations can often be found occurring with a frequency of around 5%, which current technologies can readily identify. However, other mutations can be present at much lower frequencies. MX-ICP makes possible as low as 0.01% levels of detection of mutant DNA. We believe that MX-ICP can help dramatically improve the diagnosis and treatment/monitoring of cancer patients. Using MC-ICP-based tests, clinicians can rapidly, effectively and economically monitor a patient’s therapy and progress on an ongoing basis. We plan to commercialize this product directly, but also anticipate partnering with a significant number of life sciences companies and academic institutes to accelerate the adoption and use of the technology. We continue to collaborate with a number of major academics including the University of Pennsylvania and Melbourne University.

Our next set of objectives focuses on strengthening our existing business opportunities around MX-ICP. We continue to provide products and services to biomedical researchers, physicians, medical institutions and diagnostic and pharmaceutical companies that are tied to identifying and understanding genetic mutations and variations and their roles in disease mainly focused on cancer. Our products and services help scientists and physicians understand and predict disease and drug response mainly focused on cancer. As medical practitioners learn to correlate specific mutations and patterns of mutation with specific cancer disease states, drug responses and patient outcomes, it becomes possible to optimize a treatment regimen to a specific patient. This is known as personalized or precision medicine.

Our internal estimates for the size of the cancer diagnostics market, based on multiple industry sources, suggests a rapidly growing market with a potential annual value of $28 billion (Piper Jaffray Report 2015), built on tissue biopsies and accounting for growth due to the potential for liquid biopsies or increased testing to monitoring cancer patients. Growth in this market has been in part fueled by the rapid adoption of Next-Generation Sequencing (“NGS”) and Digital PCR, along with an emphasis by the U.S. Food & Drug Administration (“FDA”) for better and more uniform compliance regarding Laboratory Designed Test assays and will be accelerated further by the adoption of liquid biopsies in association with the sequencing platforms. One of the main reasons for this is that there is still a need for more informative data to help guide treatment. We believe that this will only occur when there is a move to blood and liquid testing of cancer patients earlier and more regularly (monitoring) to ensure more accurate diagnoses and more targeted and effective treatments. Additionally the desire for less costly and easier sample collection will drive the adoption of blood and liquid testing. We believe that MX-ICP is at the forefront of technologies designed to accomplish this transition away from traditional tissue biopsies, analysis and monitoring and will help precision medicine to become a reality.

Transgenomic does not intend to build the extensive infrastructure necessary to fully commercialize MX-ICP alone. While there are applications of the technology that we will sell directly, we anticipate that the majority of revenues over time will be generated through a combination of exclusive, non-exclusive or semi-exclusive licenses to partners and collaborators. Our goal is to establish the fastest time to market possible for our product and to leverage already existing infrastructure rather than depend on making significant capital expenditures or other investments of our own. Our potential partners generally fall into one of three categories:

- Laboratory instrumentation and reagents suppliers (such as: Thermo Fisher Scientific, Inc., Illumina, Inc., Bio-Rad Laboratories, Inc., Qiagen N.V. and Affymetrix, Inc.). The usefulness of MX-ICP across all platforms and its ability to detect tumor mutations in a wide range of samples make such companies natural partners for Transgenomic. We believe that MX-ICP has the potential to greatly expand the market for cancer monitoring as a complement, not as a competitor, to existing products.

- Pharmaceutical and Biotechnology companies (such as: Amgen, Inc., Novartis AG, Clovis Oncology, Inc., AstraZeneca plc, GlaxoSmithKline plc and Bristol-Myers Squibb Company). For companies developing new cancer drugs, MX-ICP has the potential to reduce the risk of clinical trials, as well as support the development of companion diagnostics to match drugs with patients.

- Clinical Laboratories (such as: Laboratory Corporation of America Holdings, Quest Diagnostics Incorporated and the many CLIA-certified laboratories including major academic centers such as Dana Fabre Cancer Institute (DFCI) Mayo, Johns Hopkins University (JHU) and MD Anderson throughout the United States). MX-ICP would allow clinical laboratories (Molecular Diagnostics Labs) to effectively compete with more specialized providers and to become full service providers as personalized, precision medicine becomes more widely adopted and improves patient care and outcomes.

The markets in which we compete require a wide variety of technologies, products and capabilities. The combination of technological complexity and rapid change within our markets makes it difficult for a single company to develop all of the solutions that it desires to offer as part of its family of products and services. We work to broaden the range of products and services we deliver to customers in target markets through acquisitions, investments and alliances. We employ the following strategies to address the need for new or enhanced products and services:

- Developing new technologies and products internally; and
- Entering into joint-development efforts with other companies and academics.

Our strategy is to leverage the discoveries in our laboratory to create “kits” or assays or CLIA tests to distribute directly ourselves and via our strategic partnerships and licensing agreements.

We will continue to develop new applications for, and enhancements of, MX-ICP and capitalize on our expertise and intellectual properties to develop unique new applications of the MX-ICP technology for potential partnerships. We will focus on growth in our core markets via direct sales and business development activities with industry leaders across the globe.

Products

MX-ICP is our proprietary technology product with industry transforming potential. It is exclusively licensed by Transgenomic from Dana-Faber Cancer Institute. MX-ICP is a unique amplification technology that suppresses wild-type (normal) DNA and thereby enables the selective amplification of all mutations (genetic alterations) present in that region of the genome. As a result of its ultra-high sensitivity (1,000 times more sensitive than standard DNA sequencing alone), it works on almost all sample types that contain DNA, including tissue, blood, urine and saliva or sputum; it can be used on all sequencing platforms; and it is easily implemented into standard laboratory processes without significant investment of time or resources. MX-ICP has applications in all therapeutic areas, but the first and major focus at this time is the estimated expanding $28 billion market for liquid biopsies and cancer testing. The Company also believes that the current market for clinical diagnostic (MDx) use of PCR, which is estimated to be in

excess of $10 billion in 2015 based on external reports, will continue to grow and is a validation of the size of market for this type of technology and product. Importantly, MX-ICP is platform agnostic and can therefore be integrated and implemented into any clinical testing, basic research or biopharmaceutical laboratory. In addition, the MX-ICP product is a simple chemical reagent that is able to be mass-produced and supplied efficiently to any end user.

Our highly specialized genetics analytical services and expertise are utilized in our CLIA-certified laboratory in Omaha, Nebraska. Our laboratory supports pharmaceutical companies in their clinical trials, primarily Phase II and Phase III trials, and has over 20 years of clinical trials development experience and its clients include many of the top 20 worldwide pharmaceuticals and biotechnology companies.

Our expanding oncology tests are focused heavily on genetic mutations commonly associated with the major cancer types - NSCLC (lung), CRC (colorectal), breast, melanoma and prostate. We primarily test for mutations in the KRAS, NRAS, BRAF and PIK3CA genes, all associated with the most common types of cancers. The presence or absence of these mutations increasingly influences oncologists' treatment choices for their patients. We have been focused on testing for low level mutations in colorectal cancer tissue biopsies that are targets for new therapies, and we intend to continue this and improve on it as we incorporate our MX-ICP technology products into our oncology testing menu. We also offer tests for hereditary cancer-predisposing syndromes.

Sales and Marketing

Our strategy for commercializing MX-ICP is to focus on enabling strategic technology licensing agreements with established partners in the fields of: instrumentation and reagent suppliers, biotechnology and pharmaceutical companies, and clinical laboratories.

The commercial focus is broken down into three categories:

1.Services: performing services for pharmaceuticals and biotechnology companies in order to enable them to submit their drug targets to the FDA for approval

2.Products: this includes MX-ICP kits for research use and MX-ICP CLIA Testing for oncologists in the United States

3.Licensing: strategic partnerships and likening agreements to grant companies, academics and clinical laboratories with various levels of access to MX-ICP

We see over time that the majority of our revenues will come from the later "licensing" agreements and will be of a high margin, but in the near term (first two years) revenue is expected to be generated from all three commercial areas. We are focusing on these business to business activities and using our direct staff and external consultants with significant market and domain expertise to accelerate this strategy.

Customers

We expect to expand our customer base through licensing and partnership agreements for MX-ICP with pharmaceutical and biotechnology companies and clinical laboratories.

Research and Development

We continue to invest in research and development in order to remain competitive and to take advantage of new business opportunities as they arise. We maintain a program of research and development with respect to platform technologies, such as ICE COLD-PCR, instruments, test kits and services, engaging existing and new technologies to create scientific and medical applications that will add value to patient care as well as significant commercial value. Major areas of focus include the (i) development of ICE COLD-PCR applications for ultra-high sensitivity mutation detection in any liquid (including blood, sputum and urine) and tissue samples (fresh, frozen, FNA, FFPE, etc.); (ii) development of a new strategy for mutation detection and sequence confirmation using micro-capillary electrophoresis; (iii) use of commercially-available assays and the development of custom assays for detection of somatic mutations in cancer samples using NGS and digital PCR or droplet PCR; and (iv) development of biomarker assays for the marketplace. For the years ended December 31, 2015 and 2014, our research and development expenses related to continuing operations were $1.9 million and $2.2 million, respectively.

Manufacturing

Historically, we manufactured bioconsumable products including our test kits, separation columns, liquid reagents and enzymes. The major components of our WAVE Systems were manufactured for us by a third party. We integrated our hardware and software with these third party manufactured components. Our manufacturing facilities for WAVE Systems and bioconsumables were located in Omaha, Nebraska and San Jose, California. The historical costs of operating the manufacturing facilities are included in our results for discontinued operations.

Intellectual Property

To establish and protect our proprietary technologies and products, we rely on a combination of patent, copyright, trademark and trade secret laws, license agreements' contractual confidentiality provisions and confidentiality agreements. Our ICE COLD-PCR platform technology is protected by in-licensed patents that expire in various periods through 2031. As part of the FAMILION acquisition in 2010, we acquired exclusive rights to the FAMILION family of genetic tests for inherited disease, including the patents protecting this technology. Our FAMILION patents and acquired technology are included as part of our discontinued operations. As we expand our product offerings, we also are extending our patent development efforts to protect such product

offerings. Established competitors, as well as companies that purchase and enforce patents and other intellectual property, may already have patents covering similar products. There is no assurance that we will be able to obtain patents covering our products, or that we will be able to obtain licenses from such companies on favorable terms or at all. However, while patents are an important element of our success, our business as a whole is not significantly dependent on any one patent.

We will continue to file patent applications, seek new licenses, take advantage of available copyright and trademark protections and implement appropriate trade secret protocols to protect our intellectual property. Despite these precautions, there can be no assurance that misappropriation of our products and proprietary technologies will not occur.

Although we believe that our developed and licensed intellectual property rights do not infringe upon the proprietary rights of third parties, there can be no assurance that third parties will not assert infringement claims against us. Further, there can be no assurance that intellectual property protection will be available for our products in the U.S. or foreign countries.

Like many companies in the biotechnology and other high-tech industries, third parties have in the past and may in the future assert claims or initiate litigation related to patent, copyright, trademark or other intellectual property rights to business processes, technologies and related standards that are relevant to us and our customers. These assertions have increased over time as a result of the general increase in patent claims assertions, particularly in the United States. Third parties may also claim that their intellectual property rights are being infringed by our customers' use of a business process method that utilizes products in conjunction with other products, which could result in indemnification claims against us by our customers. Any claim against us, with or without merit, could be time-consuming and a distraction to management, result in costly litigation, cause product delivery delays, require us to enter into royalty or licensing agreements or pay damages or amounts in settlement, prohibit us from selling certain products or require us to develop alternative non-infringing technology. We could also be required to defend or indemnify our customers against such claims.

Government Regulation

We are subject to a variety of federal, state and municipal environmental and safety laws based on our use of hazardous materials in both manufacturing and research and development operations. We believe that we are in material compliance with applicable environmental laws and regulations. However, if we cause contamination to the environment, intentionally or unintentionally, we could be responsible for damages related to the clean-up of such contamination or individual injury caused by such contamination. We cannot predict how changes in laws and regulations will impact how we conduct our business operations in the future or whether the costs of compliance will increase in the future.

Regulation by governmental authorities in the United States and other countries is not expected to be a significant factor in the manufacturing, labeling, distribution and marketing of our products and systems, especially when considering our partnership and licensing strategy. However, we continue to monitor and engage in dialog with the FDA and other regulatory bodies. Please see the section of this Annual Report entitled "Risk Factors" for other risks associated with regulatory requirements.

Competition

The markets in which we operate are highly competitive and characterized by rapidly changing technological advances. Many of our competitors possess greater resources than us and may be able to develop and offer a greater breadth of products and/or services, coupled with significant marketing and distribution capabilities. We compete principally on the basis of uniquely enabling scientific technical advantages in specific but significant market segments.

Employees

As of December 31, 2015 and 2014, we had employees in continuing operations focused in the following areas of operation:

	December 31, 2015	2014
Manufacturing and Laboratory	11	16
Sales, Marketing and Administration	17	14
Research and Development	9	5
	37	35

All of our employees as of December 31, 2015 were full-time employees.

Our employees were employed in the following geographical locations:

	December 31, 2015	2014
United States	36	34
United Kingdom	1	1
	37	35

General Information

We were incorporated in Delaware on March 6, 1997. Our principal office is located at 12325 Emmet Street, Omaha, Nebraska 68164 (telephone: 402-452-5400). This facility houses certain administrative staff and laboratories. Our New Haven, Connecticut facility houses certain administrative operations.

Our Internet website is located at http://www.transgenomic.com. The information on our website is not a part of this Annual Report. We make available free of charge on our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our SEC reports can be accessed through the investor relations section of our Internet website.

The public may also read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The SEC's Internet website is located at http://www.sec.gov.

Executive Officers of the Registrant

Paul Kinnon. Mr. Kinnon, age 52, has served as our President and Chief Executive Officer and a Director since September 2013. On October 31, 2014, Mr. Kinnon was appointed Interim Chief Financial Officer. Mr. Kinnon has more than 20 years of global leadership experience in innovative life science and diagnostics companies. From January through August 2013, he provided consulting services to the life science sector as a Partner at Arch Global Research. During a portion of this time, Mr. Kinnon provided consulting services to us. From January 2007 to December 2012, Mr. Kinnon was President, Chief Executive Officer and a Director of ZyGEM Corporation Limited, a biotechnology company, where he transformed the company from a regional enzyme provider into a leader in integrated microfluidic technologies for forensic and clinical diagnostic applications. From May 2006 to June 2007, Mr. Kinnon was Vice President & General Manager Environmental Diagnostics (later expanded to Applied Markets) at Invitrogen Corporation (now Life Technologies), a high growth life sciences and diagnostics firm, and from October 2004 until April 2006, he was Vice President, Global Strategic Alliances at Invitrogen. Previously, Mr. Kinnon also held business, sales and marketing roles of increasing responsibility at Guava Technologies, Inc., Cellomics, Inc. and other life science companies. Mr. Kinnon earned his Bachelor of Sciences degree in Applied Chemistry at Coventry University in the United Kingdom and holds a Diploma of Marketing. A petition in bankruptcy was filed against ZyGEM Corporation Limited in April 2013.

Leon F. Richards. Mr. Richards, age 59, was appointed our Chief Accounting Officer by our Board of Directors in October 2014. Mr. Richards is an experienced corporate finance executive and certified public accountant with more than 30 years of experience building and leading financial organizations. Mr. Richards has served as our Controller since November 2012. He most recently served as Controller and Chief Accounting Officer of Baldwin Technology Company, Inc., a leading global supplier of process automation equipment for the printing and publishing industry, from May 2004 to September 2012. Mr. Richards earned his Bachelor of Business Administration and Accounting from Iona College.

Item 1A. Risk Factors.

We have a history of operating losses and may incur losses in the future.

We have experienced annual losses from continuing operations since inception of our operations. Our operating loss for the years ended December 31, 2015 and 2014 was $9.2 million and $10.6 million, respectively. These historical losses have been due principally to the expenses that we have incurred in order to develop and market our products, the fixed nature of our manufacturing costs and merger and acquisition costs.

Recurring operating losses raise substantial doubt about our ability to continue as a going concern.

We have incurred substantial operating losses and have used cash in our operating activities for the past several years. As of December 31, 2015, we had negative working capital of approximately $13.7 million. During the first quarter of 2016, we received net proceeds of approximately $2.0 million from the issuance of preferred stock and warrants to purchase shares of common stock.

Our current operating plan projects improved operating results, improvement in collection rates and monetization of underutilized assets. There are no guarantees that these efforts will be successful and, if not, we may use more cash than projected and not be able to meet our current obligations through December 31, 2016. These conditions raise substantial doubt about our ability to continue as a going concern.

As with any operating plan, there are risks associated with our ability to execute it. Therefore, there can be no assurance that we will be able to satisfy our obligations, or achieve the operating improvements as contemplated by the current operating plan. If we are unable to execute this plan, we will need to find additional sources of cash not contemplated by the current operating plan and/or raise additional capital to sustain continuing operations as currently contemplated. We could seek to raise additional funds through various potential sources such as through the sale of assets or sale of debt or equity securities. However, there can be no assurance that the additional funding sources will be available to us at reasonable terms or at all. If we are unable to achieve our operating plan or obtain additional financing, our business would be jeopardized and we may not be able to continue as a going concern.

Our future capital needs are uncertain and we may need to raise additional funds in the future.

Our future capital needs are uncertain and we may need to raise additional funds in the future through debt or equity offerings. Our future capital requirements will depend on many factors, including, but not limited to:

- Revenue generated by sales of our products;
- Expenses incurred in manufacturing and selling our products;
- Costs of developing new products or technologies;
- Costs associated with capital expenditures;
- The number and timing of strategic transactions; and
- Working capital requirements related to growing existing business.

We may need additional capital to finance our growth or to compete, which may cause dilution to existing stockholders or limit our flexibility in conducting our business activities.

We may need to raise additional capital in the future to fund expansion, respond to competitive pressures or acquire complementary businesses, technologies or services. Such additional financing may not be available on terms acceptable to us or at all. To the extent that we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution, and to the extent we engage in additional debt financing, if available, we may become subject to additional restrictive covenants that could limit our flexibility in conducting future business activities. If additional financing is not available or not available on acceptable terms, we may not be able to continue as a going concern, fund our expansion, promote our brands, take advantage of acquisition opportunities, develop or enhance services or respond to competitive pressures.

Governmental payers and health care plans have taken steps to control costs.

Medicare, Medicaid and private insurers have increased their efforts to control the costs of health care services, including clinical testing services. They may reduce fee schedules or limit/exclude coverage for certain types of tests that we perform. Medicaid reimbursement varies by state and is subject to administrative and billing requirements and budget pressures. We expect efforts to reduce reimbursements, impose more stringent cost controls and reduce utilization of testing services will continue. These efforts, including changes in laws or regulations, may have a material adverse impact on our business.

Weakness in U.S. or global economic conditions could have an adverse effect on our businesses.

The economies of the United States and other regions of the world in which we do business have experienced significant weakness, which, in the case of the U.S., has recently resulted in significant unemployment and slower growth in economic activity. A decline in economic conditions may adversely affect demand for our services and products, thus reducing our revenue. These conditions could also impair the ability of those with whom we do business to satisfy their obligations to us. The strengthening dollar has the potential to adversely impact U.S. businesses that operate overseas.

Sales have been variable.

Our laboratory performs project-based work that changes from quarter to quarter. Therefore, comparison of the results of successive quarters may not accurately reflect trends or results for the full year due to the fact that ICP is a new product and will enable the liquid biopsy market to evolve rapidly and ensure Precision Medicine is adopted globally. We see the ICP business and revenues growing as our commercial strategy is successful and our partnerships and licensing agreements become profitable.

Changes in payer mix could have a material adverse impact on our net sales and profitability.

Testing services are billed to physicians, patients, government payers such as Medicare, and insurance companies. Tests may be billed to different payers depending on a particular patient's medical insurance coverage. Government payers have increased their efforts to control the cost, utilization and delivery of health care services as well as reimbursement for laboratory testing services. Further reductions of reimbursement for Medicare and Medicaid services or changes in policy regarding coverage of tests or other requirements for payment, such as prior authorization or a physician or qualified practitioner's signature on test requisitions, may be implemented from time to time. Reimbursement for the laboratory services component of our business is also subject to statutory and regulatory reduction. Reductions in the reimbursement rates and changes in payment policies of other third party payers may occur as well. Such changes in the past have resulted in reduced payments as well as added costs and have decreased test utilization for the clinical laboratory industry by adding more complex new regulatory and administrative requirements. As a result, increases in the percentage of services billed to government payers could have an adverse impact on our net sales.

We may experience temporary disruptions and delays in processing biological samples at our facilities.

We may experience delays in processing biological samples caused by software and other errors. Any delay in processing samples could have an adverse effect on our business, financial condition and results of operations.

Our laboratories require ongoing CLIA certification.

The CLIA extended federal oversight to virtually all clinical laboratories by requiring that they be certified by the federal government or by a federally-approved accreditation agency. The CLIA requires that all clinical laboratories meet quality assurance, quality control and personnel standards. Laboratories must also undergo proficiency testing and are subject to inspections.

The sanctions for failure to comply with the CLIA requirements include suspension, revocation or limitation of a laboratory's CLIA certificate, which is necessary to conduct business, cancellation or suspension of the laboratory's approval to receive Medicare and/or Medicaid reimbursement, as well as significant fines and/or criminal penalties. The loss or suspension of a CLIA certification, imposition of a fine or other penalties, or future changes in the CLIA law or regulations (or interpretation of the law or regulations) could have a material adverse effect on us.

We believe that we are in compliance with all applicable laboratory requirements, but no assurances can be given that our laboratories will pass all future certification inspections.

Failure to comply with HIPAA could be costly.

The Health Insurance Portability and Accountability Act ("HIPAA") and associated regulations protect the privacy and security of certain patient health information and establish standards for electronic health care transactions in the United States. These privacy regulations establish federal standards regarding the uses and disclosures of protected health information. Our Molecular Labs are subject to HIPAA and its associated regulations. If we fail to comply with these laws and regulations we could suffer civil and criminal penalties, fines, exclusion from participation in governmental health care programs and the loss of various licenses, certificates and authorizations necessary to operate our Patient Testing business. We could also incur liabilities from third party claims.

Our business could be adversely impacted by health care reform.

Government attention to the health care industry in the United States is significant and may increase. The Patient Protection and Affordable Care Act passed by Congress and signed into law by President Obama in March 2010 could adversely impact our business. While certain portions of the legislation have already gone into effect, the ultimate impact of the legislation on the health care industry is still unknown, and the overall impact on our business is likely to be extensive and could result in significant changes to our business and our customers' businesses.

We may be subject to client lawsuits.

11

Providers of clinical testing services may be subject to lawsuits alleging negligence or other legal claims. Potential suits could involve claims for substantial damages. Litigation could also have an adverse impact on our client base and our reputation. We maintain liability insurance coverage for certain claims that could result from providing or failing to provide clinical testing services, including inaccurate testing results and other exposures. Our insurance coverage limits our maximum recovery on individual claims and, therefore, there is no assurance that such coverage will be adequate.

The sale of our products and business operations in international markets subjects us to additional risks.

During the past several years, international sales have represented a significant portion of our total net sales. As a result, a major portion of our net sales are subject to risks associated with international sales and operations. These risks include:

- Payment cycles in foreign markets are typically longer than in the U.S., and capital spending budgets for research agencies can vary over time with foreign governments;
- Changes in foreign currency exchange rates can make our products more costly in local currencies because our foreign sales are typically paid for in British Pounds or in Euros;
- The potential for changes in U.S. and foreign laws or regulations that result in additional import or export restrictions, higher tariffs or other taxes, more burdensome licensing requirements or similar impediments may limit our ability to sell products and services profitably in these markets; and
- The fluctuation of foreign currency exchange rates to the U.S. Dollar and the Euro to the British Pound can cause our net sales and expenses to increase or decrease, which adds risk to our financial statements.

Our dependence on our suppliers exposes us to certain risks.

We rely on various suppliers for products and materials to produce our products. In the event that they would be unable to deliver these items due to product shortages or business closures, we may be unable to deliver our products to our customers in a timely manner or may need to increase our prices. The current economy poses the additional risk of our suppliers' inability to continue their businesses as usual.

Our markets are very competitive.

Many of our competitors have greater resources than we do and may enjoy other competitive advantages. This may allow them to more effectively market their products to our customers or potential customers, to develop products that make our products obsolete or to produce and sell products less expensively than us. As a result of these competitive factors, demand for and pricing of our products and services could be negatively affected.

Our patents may not protect us from others using our technology, which could harm our business and competitive position.

Patent law relating to the scope of claims in the technology fields in which we operate is still evolving. The degree of future protection for our proprietary rights is uncertain. Furthermore, we cannot be certain that others will not independently develop similar or alternative products or technology, duplicate any of our products, or, if patents are issued to us, design around the patented products developed by us. Our patents or licenses could be challenged by litigation and, if the outcome of such litigation were adverse to us, our competitors could be free to use our technology. We may not be able to obtain additional patents for our technology, or if we are able to do so, patents may not provide us with adequate protection or be commercially beneficial. In addition, we could incur substantial costs in litigation if we are required to defend ourselves in patent suits brought by third parties or if we initiate such suits.

We cannot be certain that other measures taken to protect our intellectual property will be effective.

We rely upon trade secrets, copyright and trademark laws, non-disclosure agreements and other contractual confidentiality provisions to protect some of our confidential and proprietary information that we are not seeking patent protection for various reasons. Such measures, however, may not provide adequate protection for our trade secrets or other proprietary information. If such measures do not protect our rights, third parties could use our technology and our ability to compete in the market would be reduced.

We are dependent upon licensed technologies and may need to obtain additional licenses in the future to offer our products and remain competitive.

We have licensed key components of our technologies from third parties. If these agreements were to terminate prematurely due to our breach of the terms of these licenses or we otherwise fail to maintain our rights to such technologies, we may lose the right to manufacture or sell a substantial portion of our products. In addition, we may need to obtain licenses to

additional technologies in the future in order to keep our products competitive. If we fail to license or otherwise acquire necessary technologies, we may not be able to develop new products that we need to remain competitive.

The protection of intellectual property in foreign countries is uncertain.

A significant percentage of our sales are to customers located outside the U.S. Patent and other intellectual property laws of some foreign countries may not protect our intellectual property rights to the same extent as U.S. laws. We may need to bring proceedings to defend our patent rights or to determine the validity of our competitors' foreign patents. These proceedings could result in substantial cost and diversion of our other efforts. Finally, some of the patent protections available to us in the U.S. are not available to us in foreign countries due to the laws of those countries.

Our products could infringe on the intellectual property rights of others.

There are a significant number of U.S. and foreign patents and patent applications submitted for technologies in, or related to, our area of business. As a result, our use of our technology could infringe patents or proprietary rights of others. This may lead others to assert patent infringement or other intellectual property claims against us. We could incur substantial costs in litigation if we are required to defend against intellectual property claims by third parties. Additionally, any licenses that we might need as a result of any actual infringement might not be available to us on commercially reasonable terms, if at all.

Our failure to comply with any applicable government laws and regulations or otherwise respond to claims relating to improper handling, storage or disposal of hazardous chemicals that we use may adversely affect our results of operations.

Our research and development and manufacturing activities involve the controlled use of hazardous materials and chemicals. We are subject to federal, state, local and international laws and regulations governing the use, storage, handling and disposal of hazardous materials and waste products. If we fail to comply with applicable laws or regulations, we could be required to pay penalties or be held liable for any damages that result and this liability could exceed our financial resources. We cannot be certain that accidental contamination or injury will not occur. Any such accident could damage our research and manufacturing facilities and operations, resulting in delays and increased costs.

We may issue a substantial amount of our common stock to holders of options and warrants and this could reduce the market price for our stock.

At December 31, 2015, we had obligations to issue 9,963,886 shares of common stock upon exercise of outstanding stock options, warrants or conversion rights. The issuance of these securities may be dilutive to our current stockholders and

could negatively impact the market price of our common stock.

Our common stock is thinly traded and a large percentage of our shares are held by a small group of unrelated, institutional owners.

At December 31, 2015, we had 13,915,691 shares of common stock outstanding. The sale of a significant number of shares into the public market has the potential to cause significant downward pressure on the price of our common stock. This is particularly the case if the shares being placed into the market exceed the market's ability to absorb the stock. This presents an opportunity for short sellers to contribute to the further decline of our stock price. If there are significant short sales of our stock, the price decline that would result from this activity will cause the share price to decline more so, which, in turn, may cause long holders of the stock to sell their shares, thereby contributing to sales of our stock in the market. In addition, the large concentration of our shares are held by a small group of stockholders which could result in increased volatility in our stock price due to the limited number of shares available in the market.

We have previously identified material weaknesses and ineffective internal controls could impact our business and financial results.

Our internal control over financial reporting may not prevent or detect misstatements because of its inherent limitations, including the possibility of human error, the circumvention or overriding of controls, or fraud. In the course of auditing our financial statements as of and for the year ended December 31, 2014, our independent registered public accounting firm identified material weaknesses in our internal control over financial reporting

relating to proper timing and recognition of revenue and the elements used in our analysis and evaluation of the allowance for doubtful accounts to ensure that the allowance for doubtful accounts is reasonably stated. We remediated these material weaknesses in the year ended December 31, 2015.

Even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. If we fail to maintain the adequacy of our internal controls, including any failure to implement required new or improved controls, or if we experience difficulties in their implementation, our business and financial results could be harmed, we could fail to meet our financial reporting obligations and we may not be able to accurately report financial results or prevent fraud.

Failure to comply with covenants in our loan agreement with affiliates of Third Security, LLC could adversely affect us.

Our revolving line of credit and term loan with affiliates of Third Security, LLC, a related party, (the "Lenders") are governed by a Loan and Security Agreement, which contains certain affirmative and negative covenants. Under the term loan, we are required to maintain a minimum liquidity ratio and achieve a minimum amount of revenue, and we also agreed not to (i) pledge or otherwise encumber our assets other than to the Lenders, (ii) enter into additional borrowings or guarantees, (iii) repurchase our capital stock, or (iv) enter into certain mergers or acquisitions without the Lenders' consent. To secure the repayment of amounts borrowed under the revolving line of credit and term loan, we granted the Lenders a security interest in all of our assets. Failure to comply with the covenants under the loan agreement would be an event of default under the loan agreement that, if not cured or waived, would give the Lenders the right to cease making additional advances, accelerate repayment of all sums due and take action to collect the amounts owed to them, including foreclosing on their security interest, which would have a material adverse effect on our financial condition and results of operations. As of December 31, 2015, we were not in compliance with the financial covenants of the Loan and Security Agreement.

If we cannot meet the continued listing requirements of The Nasdaq Stock Market LLC ("Nasdaq"), Nasdaq may delist our shares of common stock, which would have an adverse impact on the trading volume, liquidity and market price of our common shares.

On February 23, 2016, we received written notice (the "Notice") from Nasdaq indicating that, based on the closing bid price of our common stock for the preceding 30 consecutive business days, we were not in compliance with the $1.00 minimum bid price requirement for continued listing on the Nasdaq Capital Market (the "Minimum Bid Price Requirement"), as set forth in Nasdaq Listing Rule 5550(a)(2). The Notice has no immediate effect on the listing of our common stock, and our common stock will continue to trade on the Nasdaq Capital Market under the symbol "TBIO" at this time. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we have a period of 180 calendar days, or until August 22, 2016, to regain compliance with the Minimum Bid Price Requirement. To regain compliance, the closing bid price of our common stock must meet or exceed $1.00 per share for at least ten consecutive business days during this 180 calendar day period.

If we are not in compliance with the Minimum Bid Price Requirement by August 22, 2016, Nasdaq may provide us with a second 180 calendar day period to regain compliance. To qualify for the second 180 calendar day period, we would be required to (i) meet the continued listing requirement for the Nasdaq Capital Market for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, except for the Minimum Bid Price Requirement, and (ii) notify Nasdaq of our intent to cure our noncompliance with the Minimum Bid Price, including by effecting a reverse stock split, if necessary. If we do not indicate our intent to cure the deficiency or if it does not appear to Nasdaq that it would be possible for us to cure the deficiency, we would not be eligible for the second 180 calendar day period, and our common stock would then be subject to delisting from the Nasdaq Capital Market.

If we do not regain compliance within the allotted compliance period(s), including any extensions that may be granted by Nasdaq, Nasdaq will provide notice that our common stock will be subject to delisting. We would then be entitled to appeal the Nasdaq Staff's determination to a Nasdaq Listing Qualifications Panel and request a hearing.

We intend to monitor the closing bid price of our common stock and consider our available options to resolve our noncompliance with the Minimum Bid Price Requirement. No determination regarding our response to the Notice has been made at this time. There can be no assurance that we will be able to regain compliance with the Minimum Bid Price Requirement or will otherwise be in compliance with the other listing standards for the Nasdaq Capital Market. A suspension or delisting of our common stock could adversely affect our relationships with our business partners and suppliers and customers' and potential customers' decisions to purchase our products and services, and could have a

material, adverse impact on our business and operating results. In addition, a suspension or delisting could impair our ability to raise additional capital through equity or debt financings and our ability to attract and retain employees by means of equity compensation.

In the event of a delisting or suspension, our common stock could begin trading on the over-the-counter bulletin board, or in the so-called “pink sheets.” In the event of such trading, it is likely that there would be significantly less liquidity in the trading of our common stock; decreases in institutional and other investor demand for our common stock, coverage by securities analysts, market making activity and information available concerning trading prices and volume; and fewer broker-dealers willing to execute trades in our common stock. The occurrence of any of these events could result in a further decline in the market price of our common stock and could have a material adverse effect on us.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We currently lease facilities throughout the world under non-cancelable leases with various terms. The following table summarizes certain information regarding our leased facilities. Annual rent amounts presented in the table are reflected in thousands.

Location	Function	Square Footage	2016 Scheduled Rent	Lease Term Expires
Omaha, Nebraska	Multi Functional (1)	18,265	$221	July 2022
Omaha, Nebraska	Multi Functional (1)	4,410	$42	May 2017
New Haven, Connecticut	Multi Functional (2)	22,459	$461	June 2020

(1) Multi Functional facilities include functions related to manufacturing, services, sales and marketing, research and development and/or administration.

(2) Multi Functional facilities include functions related to manufacturing, services, sales and marketing, research and development and/or administration. Part of this facility houses functions that are included in our discontinued operations.

We believe that these facilities are adequate to meet our current and planned needs. We believe that if additional space is needed in the future, we could find alternate space at competitive market rates without a substantial increase in cost.

Item 3. Legal Proceedings.

We are subject to a number of claims of various amounts which arise out of the normal course of our business. In our opinion, the disposition of pending claims could have a material adverse effect on our financial position, results of operations or cash flows.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information. Our common stock is listed on the Nasdaq Capital Market under the symbol "TBIO". Prior to May 9, 2014, our common stock traded on the OTCQB under the symbol "TBIO". The following table sets forth the high and low closing prices for our common stock during each of the quarters of 2015 and 2014. The over-the-counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	High	Low
Year Ended December 31, 2015		
First Quarter	$3.90	$1.41
Second Quarter	$2.63	$1.39
Third Quarter	$1.72	$0.92
Fourth Quarter	$1.36	$0.75
Year Ended December 31, 2014		
First Quarter	$6.42	$4.21
Second Quarter	$4.85	$3.10
Third Quarter	$4.00	$3.60
Fourth Quarter	$3.81	$1.52

Performance Graph. We are a smaller reporting company, as defined by Rule 12b-2 of the Exchange Act, and are not required to provide the information required under this item.

Holders. At March 31, 2016, there were 20,695,870 shares of our common stock outstanding and approximately 78 holders of record.

Dividends. We have never declared or paid any cash dividends on our common stock and we do not anticipate paying any cash dividends on our common stock in the foreseeable future. Dividends on our common stock will be paid only if and when declared by our Board. The Board's ability to declare a dividend is subject to limits imposed by Delaware corporate law. Pursuant to the terms of the Loan and Security Agreement by and between us and affiliates of the Lenders, our Board also may not pay any dividends without the prior consent of the Lenders; provided that our Board may pay dividends solely in common stock without such consent. In determining whether to declare dividends, the Board may consider our financial condition, results of operations, working capital requirements, future prospects and other relevant factors.

Sales of Unregistered Securities.

Convertible Notes Private Placement: On December 31, 2014, we entered into an Unsecured Convertible Promissory Note Purchase Agreement (the "Note Purchase Agreement") with an accredited investor (the "Investor") pursuant to which we agreed to issue and sell to the Investor in a private placement an unsecured convertible promissory note (the "Initial Note"). We issued the Initial Note in the aggregate principal amount of $750,000 to the Investor on December 31, 2014. On January 15, 2015, we entered into the Note Purchase Agreement with seven accredited investors (the "Additional Investors" and, collectively with the Investor, the "Note Investors") and, on January 20, 2015, issued and sold to the Additional Investors, in a private placement, notes (the "Additional Notes" and, collectively with the Initial Note, the "Notes") in an aggregate principal amount of $925,000. Under the terms of the Notes, the outstanding principal and unpaid interest accrued is convertible into shares of our common stock as follows: (i) commencing upon the date of issuance of the applicable Note (but no earlier than January 1, 2015), the Note Investor became entitled to convert, on a one-time basis, up to 50% of the outstanding principal and unpaid interest accrued under the Note, into shares of our common stock at a conversion price equal to the lesser of (a) the average closing price of the common stock on the

principal securities exchange or securities market on which our common stock is then traded (the "Market") for the 20 consecutive trading days immediately preceding the date of conversion, and (b) $2.20 (subject to adjustment for stock splits, stock dividends, other distributions, recapitalizations and the like); and (ii) commencing February 15, 2015, the Note Investor was entitled to convert, on a one-time basis, any or all of the remaining outstanding principal and unpaid interest accrued under the

Note, into shares of our common stock at a conversion price equal to 85% of the average closing price of our common stock on the Market for the 15 consecutive trading days immediately preceding the date of conversion.

Craig-Hallum acted as the sole placement agent for the sale and issuance of the Additional Notes. In connection with the sale and issuance of the Additional Notes, we issued to Craig-Hallum an unsecured convertible promissory note, upon the same terms and conditions as the Notes, in an aggregate principal amount equal to 5% of the proceeds received by us pursuant to the sale and issuance of the Additional Notes, or $46,250. As of the date of filing of this Annual Report, the Placement Agent Note remains outstanding.

We sold the Notes to "accredited investors," as that term is defined in the Securities Act of 1933, as amended (the "Securities Act"), and in reliance on the exemption from registration afforded by Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated under the Securities Act and corresponding provisions of state securities or "blue sky" laws. Each Investor represented to us that it was acquiring the Note, and would acquire the underlying shares of common stock, for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof.

The issuance of the Initial Note required the repricing and issuance of additional common stock warrants to the holders of warrants issued in connection with our February 2012 private placement. The exercise price of the 2012 warrants decreased from $10.86 per share to $10.25 per share and the number of shares issuable upon exercise of the warrants increased from 1,309,785 to 1,387,685.

The issuance of the Additional Notes required the repricing and issuance of additional common stock warrants to the holders of warrants issued in connection with our February 2012 private placement. The exercise price of the 2012 warrants decreased from $10.25 per share to $9.59 per share and the number of shares issuable upon exercise of the warrants increased from 1,387,685 to 1,483,161.

As of December 31, 2015, $1,150,000 of the aggregate principal amount of the Notes, and accrued interest thereon, has been converted into an aggregate of 783,809 shares of our common stock.

July 2015 Offering: On June 30, 2015, we entered into a Securities Purchase Agreement with certain accredited investors (the "July 2015 Investors") pursuant to which, on July 7, 2015, we sold to the July 2015 Investors, and the July 2015 Investors purchased from us, (a) an aggregate of approximately 1.5 million shares of our common stock at a price per share of $1.42, (b) warrants (the "Series B Warrants") to purchase up to an aggregate of 0.7 million shares of our common stock with an exercise price of $0.01 per share, and (c) warrants (the "Series A Warrants" and, together with the Series B Warrants, the "July 2015 Warrants") to purchase up to an aggregate of 1.2 million shares of our common stock, with an exercise price of $1.66 per share (collectively, the "July 2015 Offering"). The purchase price for the Series B Warrants was $1.42 per share of our common stock subject to the Series B Warrants. Each of the July 2015 Warrants has a term of 5 and 1/2 years. The Series B Warrants are immediately exercisable. The Series A Warrants became exercisable on January 7, 2016, six months from the date of issuance. The aggregate gross proceeds to us from the July 2015 Offering were approximately $3.0 million.

Craig-Hallum Capital Group LLC (the "2015 Placement Agent") served as the sole placement agent for the July 2015 Offering. In consideration for services rendered as the placement agent in the July 2015 Offering, we (a) paid to the 2015 Placement Agent cash commissions equal to approximately $212,783, or 7.0% of the gross proceeds received in the July 2015 Offering; (b) issued to the 2015 Placement Agent a five-year warrant to purchase up to 107,033 shares of our common stock with an exercise price of $1.66 per share and which is subject to other terms that are the same as the terms of the Series A Warrants (the "Agent Warrant"); and (c) reimbursed the 2015 Placement Agent for reasonable out-of-pocket expenses, including fees paid to the 2015 Placement Agent's legal counsel, incurred in connection with the July 2015 Offering, which reimbursable expenses did not exceed $50,000.

The shares of common stock, the July 2015 Warrants and the Agent Warrant issued in connection with the July 2015 Offering were offered and sold in transactions exempt from registration under the Securities Act, in reliance on Section 4(a)(2) thereof and Rule 506 of Regulation D thereunder. Each of the July 2015 Investors represented that it was an "accredited investor," as defined in Regulation D, and was acquiring the securities for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof.

The July 2015 Offering required the repricing and issuance of additional common stock warrants to the holders of warrants issued in connection with our February 2012 private placement. The exercise price of these warrants

decreased from $7.56 per share to $6.50 per share and the number of shares issuable upon exercise of the warrants increased from 1,881,396 to 2,188,177.

Issuer Purchases of Equity Securities. We made no purchases of our common stock during the year ended December 31, 2015. Therefore, tabular disclosure is not presented.

Item 6. Selected Consolidated Financial Data.

We are a smaller reporting company, as defined by Rule 12b-2 of the Securities Exchange Act of 1934, as amended, and are not required to provide the information required under this item.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

This Management's Discussion and Analysis contains forward-looking statements that involve risks and uncertainties. Please see the section entitled "Forward-Looking Statements" at the beginning of Item 1 and the section entitled "Risk Factors" under Item 1A for important information to consider when evaluating such statements.

You are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements we make are not guarantees of future performance and are subject to various assumptions, risks and other factors that could cause actual results to differ materially from those suggested by these forward-looking statements.

We expressly disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Transgenomic, Inc. ("we", "us", "our", the "Company" or "Transgenomic") is a biotechnology company advancing personalize medicine for the detection and treatment of cancer and inherited diseases through our proprietary molecular technologies and clinical and research services. A key goal is to bring our Multiplexed ICE COLD-PCR ("MX-ICP") product to the clinical market through strategic partnerships and licensing agreements, enabling the use of blood and other bodily fluids for more effective and patient-friendly diagnosis, monitoring and treatment of cancer.

MX-ICP is technology proprietary to Transgenomic. It is a reagent that improves the ability to detect genetic mutations by 100 - 400 fold over existing technologies. This technology has been validated internally on all currently available sequencing platforms, including Sanger, Next Gen Sequencing and Digital PCR. By enhancing the level of detection of genetic mutations and suppressing the normal or wild-type DNA, several benefits are provided. It is generally understood that most current technologies are unable to consistently identify mutations that occur in less than approximately 5% of a sample. However, many mutations found at much lower levels, even as low as 0.01%, are known to be clinically relevant and can have significant consequences to a patient: both in terms of how they will respond to a given drug or treatment and how a given tumor is likely to change over time. More importantly, in our view, is the ability to significantly improve the level of detection while using blood, saliva and even urine as a source for DNA, rather than depending on painful, expensive and potentially dangerous tumor biopsies. We believe that this is an important advancement in patient care with respect to cancer detection, treatment and monitoring and can result in significant cost savings for the healthcare system by replacing invasive procedures with the simple collection of blood or other bodily fluids. By broadening the types of samples that can be used for testing and allowing all sequencing platforms to provide improved identification of low level mutations, MX-ICP has the potential to make testing more readily available, more patient friendly, enable genetic monitoring of disease progression, effectively guide treatment protocols, and reduce the overall cost of diagnosis and monitoring while significantly improving patient outcomes.

Historically, our operations were organized and reviewed by management along our major product lines and presented in two business segments: Laboratory Services and Genetic Assays and Platforms. Beginning with the quarter ended September 30, 2015, our operations are now organized as one business segment, our Laboratory Services segment, and during the fourth quarter of 2015, we began including a portion of our Laboratory Services segment as discontinued operations.

Our laboratory in Omaha, Nebraska is focused on providing genetic analytical services related to oncology and pharmacogenomics research services supporting Phase II and Phase III clinical trials conducted by pharmaceutical and

biotechnology companies. Our laboratory employs a variety of genomic testing service technologies, including our proprietary MX-ICP technology. ICE COLD-PCR is a proprietary ultra-high sensitivity platform technology with breakthrough potential to enable wide adoption of personalized, precision medicine in cancer and other diseases. It can be run in any laboratory that contains standard PCR systems. MX-ICP enables detection of multiple known and unknown mutations from virtually any sample type, including tissue biopsies, blood, urine, saliva, cell-free DNA ("cfDNA") and circulating tumor cells ("CTCs") at levels greater than 1,000-fold higher than standard DNA sequencing techniques. It is easy to implement and use within existing workflows. Our

laboratory in Omaha is certified under the Clinical Laboratory Improvement Amendment ("CLIA") as a high complexity laboratory and is accredited by the College of American Pathologists.

The following discussion should be read together with our financial statements and related notes contained in this Annual Report. Results for the year ended December 31, 2015 are not necessarily indicative of results that may be attained in the future.

Executive Summary
2015 Results of Continuing Operations

Net sales for the year ended December 31, 2015 of $1.7 million increased $0.4 million or 33% versus the $1.3 million reported for the year ended December 31, 2014. The increase primarily reflects an increase in sales of our contract laboratory services.

Gross profit was a negative $0.3 million for the year ended December 31, 2015 versus a negative $0.9 million for the year ended December 31, 2014. The increase in gross profit was a result of the increased sales along with decreased laboratory costs in 2015 as compared to 2014.

Operating expenses of $8.9 million for the year ended December 31, 2015 were $0.7 million lower than the comparable 2014 period. This is due to decreases in stock compensation costs and patent costs in 2015 as compared to 2014.

The loss from operations for the year ended December 31, 2015 was $9.2 million, versus $10.6 million for the comparable 2014 period, due to the increased gross profit and lower operating expenses.

We reported a net loss from continuing operations of $10.1 million in 2015 as compared to $10.8 million for the year ended December 31, 2014.

2015 Overview and Recent Highlights
We are a biotechnology company advancing personalized medicine in cardiology, oncology and inherited diseases through our revolutionary multiplexed ICE-COLD PCR™, or MX-ICP, technology. We also provide specialized clinical and research services to biopharmaceutical companies developing targeted therapies.

On February 27, 2015, we entered into a purchase agreement with Craig-Hallum Capital Group LLC (the "Underwriter") pursuant to which we sold 3,573,899 shares of our common stock and corresponding warrants to purchase up to 714,780 shares of common stock. Each share of common stock was sold in combination with a warrant to purchase 0.20 of a share of common stock. The purchase price to the public for each share of common stock and accompanying warrant was $1.95. The purchase price paid by the Underwriter to us for the common stock and accompanying warrants was $1.8135. The net proceeds to us, after deducting the Underwriter's discount and other estimated expenses, were approximately $6.2 million.

On March 11, 2015, we announced an expanded license agreement with Exiqon A/S for access to their proprietary Locked Nucleic Acid (LNA™) oligonucleotides that enhance MX-ICP's ultra-sensitive detection of cancer mutations in tissue and liquid biopsies. The expanded license agreement provides us with worldwide access to LNA oligos for use with all of our proprietary ultra-high sensitivity mutation enrichment technologies for analysis of all cancer genes on all platforms.

On April 20, 2015, we announced that our MX-ICP technology was now available to pharmaceutical and biotechnology customers of our Biomarker Identification business unit. MX-ICP is an ultra-high sensitivity DNA amplification technology that allows the detection of multiple mutations in multiple genes from any sample, either from a tumor biopsy or from biofluids such as blood or urine.

On April 23, 2015, we announced a revised agreement with Horizon Discovery Group to incorporate their advanced human genomic reference standards in our MX-ICP kits on an original equipment manufacturer (OEM) basis, further advancing the quality and performance of MX-ICP.

On May 29, 2015, at the 2015 American Society of Clinical Oncology (ASCO) Annual Meeting, we announced the launch of our new MX-ICP CLIA mutation detection service to enable more informed diagnoses, better treatment decisions and ongoing cancer patient monitoring. The service leverages the ultra-high sensitivity of our MX-ICP technology to deliver highly accurate results from almost any type of patient sample. The first available tests are for the detection of epidermal growth factor receptor (EGFR) mutations applicable to lung and colorectal cancer. We intend to add additional detection tests on an ongoing basis.

On June 9, 2015 we announced that Mya Thomae had been named to the Board of Directors and Harjit Kullar, Ph.D., was appointed Vice President of Marketing for the Biomarker Discovery and Genetic Assays and Platforms business segments. Ms. Thomae is Regulatory Head at sequencing leader Illumina and Dr. Kullar held marketing and sales positions of increasing

responsibility at Life Technologies and Thermo Fisher.

On June 11, 2015 we announced that Katherine Richardson, Ph.D., Transgenomic's Vice President of Research & Development, would deliver a keynote address at the GTBio Cancer Markers & Liquid Biopsies Conference. In her talk, Dr. Richardson highlighted how our MX-ICP technology uniquely enables use of liquid biopsies and facilitates broader adoption of precision and personalized medicine.

On June 22, 2015, we announced our plans to launch a pipeline of MX-ICP-based cancer tests during 2015, including the release of up to six new lab-based cancer tests targeting actionable mutations in melanoma, lung cancer and colorectal cancer. The tests will include single and multiple gene panel tests and are usable with liquid or tissue biopsy sample. The tests will be available for diagnostic use through our CLIA-certified laboratory.

On June 30, 2015, we entered into a Securities Purchase Agreement that raised gross proceeds of approximately $3.0 million in a private placement financing. Pursuant to the agreement, we sold an aggregate of approximately 1.5 million shares of our common stock and warrants to purchase up to an aggregate of 0.7 million shares of our common stock, in each case at a purchase price of $1.42 per share. Additionally, in accordance with the agreement, we also sold warrants to purchase up to an aggregate of 1.2 million shares of our common stock with an exercise price of $1.66 per share.

On July 1, 2015, we announced the availability of our ICEme™ Mutation Enrichment Kits to cancer researchers worldwide. The kits, which were launched on June 30, 2015, are based on our Multiplexed ICE-COLD PCR™ ("MX-ICP") technology and they are customizable to meet researchers' specific needs. The initial menu includes 17 clinically actionable mutations/exons for use as single mutation tests or in combination. MX-ICP is validated and available for use on all sequencing platforms.

On August 5, 2015, we announced the launch of a new pilot clinical study of our MX-ICP liquid biopsy technology. Four leading biopharmaceutical firms have joined the pilot program, which was initiated with an undisclosed market-leading oncology company earlier this year. The primary aim of the pilot study is to validate the accuracy and utility of using MX-ICP-based liquid biopsies to guide and monitor cancer clinical trials. The study will include a variety of cancers and several different sequencing platforms.

On August 10, 2015, we announced the establishment of a Clinical-Commercial Advisory Board (CCAB) for oncology applications of our MX-ICP technology. The CCAB is headed by Dr. Scott Patterson, a recognized expert in the application of genetic biomarkers to cancer drug development. Also joining as inaugural CCAB members are Dr. Bruce E. Johnson, Chief Clinical Research Officer at the Dana-Farber Cancer Institute, and molecular pathologist Professor Paul Waring of the University of Melbourne, who is a pioneer in the application of genomic technology to cancer diagnostics and drug development. Additional CCAB members are expected to be announced in the coming months.

On August 19, 2015, we announced the launch of our MX-ICP EGFR Analysis lung cancer panel that covers key actionable mutations while providing precision detection levels down to as low as 0.01%. The panel uses our MX-ICP technology. The panel adds to the mutations included in our first epidermal growth factor receptor ("EGFR") tests launched in May 2015 adding mutations in EGFR exons 18-21 that are associated with resistance to tyrosine kinase inhibitor ("TKI") cancer drugs and broadening the testing options available to the oncologist. Our EGFR panels address all of the known mutations that affect EGFR status and the likely efficacy of TKI drugs for the patient's cancer.

On September 17, 2015, we announced that we had granted our first license for commercial rights to our liquid biopsy technology. We granted the exclusive license to the University of Melbourne to use our MX-ICP technology for research and clinical applications in Australia.

On November 5, 2015, we announced the launch of our new comprehensive MX-ICP Non-Small Cell Lung Cancer ("NSCLC") Analysis panel that covers the key actionable mutations that are relevant to the targeted treatment of NSCLC, one of the most common types of cancer and the leading cause of cancer deaths in the U.S. The panel uses our MX-ICP technology that generates highly accurate results from small amounts of blood or tissue samples at precision detection levels down to as low as 0.01%. It is available for clinical diagnostic use through our CLIA laboratory.

On December 23, 2015, we announced that we were awarded a two-year Small Business Technology Transfer (STTR) grant by the US National Institutes of Health (NIH). The $1.5 million grant will fund a collaborative project with the Dana-Farber Cancer Institute to augment the multiplexing capabilities of our ICE COLD-PCR™ technology. ICE COLD-PCR was originally developed by Dana-Farber, which has licensed exclusive worldwide rights to Transgenomic.

Sale of Assets and Discontinued Operations

On September 8, 2015, we entered into an Asset Purchase Agreement (the "Asset Purchase Agreement") with Edge BioSystems, Inc. ("Columns Buyer"), pursuant to which we agreed to sell to Columns Buyer, and Columns Buyer agreed to purchase from us, our manufacturing, marketing and selling of high quality polymer and silica based beads and resin and chromatography columns business (collectively, the "Columns Business"). The Columns Business was part of our former segment, Genetic Assays and Platforms. Pursuant to the Asset Purchase Agreement, Columns Buyer acquired substantially all of the assets used solely in connection with the Columns Business and assumed certain liabilities of the Columns Business for a total cash purchase price of approximately $2.1 million (the "Asset Sale"), which was paid on September 8, 2015 upon the closing of the Asset Sale. During the year ended December 31, 2015, we recorded a gain on the sale of the Columns Business of $1.5 million.

On November 25, 2015, we entered into an Asset Purchase Agreement (the "Purchase Agreement") with ADSTEC Corporation ("ADSTEC") and ADS Biotec Inc., a wholly-owned subsidiary of ADSTEC ("ADS Biotec"), pursuant to which we sold (1) to ADSTEC our facilities located in Glasgow, Scotland and on Irvington Road in Omaha, Nebraska (together, the "Facilities") and all of our stock, inventory and raw materials located at the Facilities (collectively, the "Inventory"), and (2) to ADS Biotec (a) all of the remaining assets relating to our Genetic Assays and Platforms business segment (the "Business"), other than the Inventory (the "Purchased Assets"), and (b) all of the ordinary shares of Transgenomic Limited, a wholly-owned subsidiary of ours (the "Shares"). The Purchase Agreement superseded the binding term sheet between us and ADSTEC, effective as of September 30, 2015, as disclosed in our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 30, 2015. Pursuant to the Purchase Agreement, ADSTEC and ADS Biotec acquired the Facilities, the Inventory, the Purchased Assets and the Shares for an aggregate purchase price of approximately $300,000, and ADS Biotec assumed our financial and human resources commitments related to the Business (the "Transaction"). During the year ended December 31, 2015, we recorded a loss on the Transaction of $1.7 million.

Together, the Asset Sale and the Transaction represent the divestiture of our Genetic Assays and Platforms business resulting in a strategic shift that will have a major effect on our operations and financial results. Therefore, the divested operations of our Genetic Assays and Platforms business meet the criteria to be reported as discontinued operations.

During the fourth quarter of 2015, our Board of Directors took actions to begin the process of divesting our Patient Testing business located in New Haven, Connecticut. In March of 2016, we announced that we had suspended testing services in our Patient Testing laboratory as we review and evaluate various strategic alternatives for that business. As a result of these actions, as of December 31, 2015, our Patient Testing business meets the criteria to be reported as discontinued operations.

Results of Continuing Operations For The Years Ended December 31, 2015 and 2014.

Net Sales.

Net sales were as follows:

	Dollars in Thousands				
	Year Ended December 31,		Change		
	2015	2014	$	%	
Total net sales	$1,653	$1,240	$413	33	%

Net sales increased $0.4 million during the year ended December 31, 2015 as compared to the same period of 2014. This increase resulted from an increase in our contract laboratory services.

Costs of Goods Sold.

Costs of goods sold includes material costs for the products that we sell and substantially all other costs associated with our manufacturing facilities (primarily personnel costs, rent and depreciation) associated with the operations of

our laboratories.

Gross Profit.

Gross profit and gross margins for each of our business segments were as follows:

	Dollars in Thousands			
	Year Ended December 31,		Margin %	
	2015	2014	2015	2014
Gross profit	$(287)	$(935)	(17)%	(75)%

Gross profit was a negative $0.3 million, or (17)% of total net sales, during the year ended December 31, 2015, compared to $0.9 million, or (75)% of total net sales, during the same period of 2014. The gross profit increase in 2015 primarily reflects the increased net sales along with decreased laboratory costs in 2015 as compared to 2014.

Operating expenses.

The following table summarizes operating expenses further described below for the years ended December 31, 2015 and 2014:

	Dollars in Thousands	
	Year Ended December 31,	
	2015	2014
Selling, general and administrative	$7,055	$7,385
Research and development	1,853	2,249
Total	$8,908	$9,634

Selling, General and Administrative Expenses.

Selling, general and administrative expenses consist primarily of personnel costs, marketing, travel costs, professional fees, bad debt expense and facility costs. Our selling, general and administrative costs decreased to $7.1 million during the year ended December 31, 2015 compared to $7.4 million for the same period in 2014. Included in selling, general and administrative costs, we had a $0.3 million decrease in stock compensation costs in 2015 as compared to 2014.

Research and Development Expenses.

Research and development expenses include primarily personnel costs, intellectual property legal fees, outside services and supplies and facility costs and are expensed in the period in which they are incurred. During the years ended December 31, 2015 and 2014 these costs totaled $1.9 million and $2.2 million, respectively. Research and development expenses totaled 112% and 181% of net sales during the years ended December 31, 2015 and 2014, respectively. The decrease in research and development expenses in 2015 as compared to 2014 includes a decrease in patent costs and outside services.

Other Income (Expense), net.

The following table summarizes other income (expense) for the years ended December 31, 2015 and 2014:

	Dollars in Thousands	
	Year Ended December 31,	
	2015	2014
Interest expense	$(724)	$(665)
Income from change in fair value of warrants	(205)	455
Other, net	(14)	—
Total other expense, net	$(943)	$(210)

Other expense, net for the year ended December 31, 2015 totaled $0.9 million. Other expense, net included interest expense primarily relating to our debt along with expense associated with the change in fair value of the common stock warrants. The expense associated with the common stock warrants is a non-cash item.

Other expense, net for the year ended December 31, 2014 totaled $0.2 million. Other expense, net included interest expense partially offset by the income associated with the change in fair value of the common stock warrants.

Income Tax Expense (Benefit).
Income tax expense was zero for each of the years ended December 31, 2015 and 2014.
We continue to assess the recoverability of deferred tax assets and the related valuation allowance. To the extent we begin to generate taxable income in future periods and determine that such valuation allowance is no longer required, the tax benefit of the remaining deferred tax assets will be recognized at such time. Our net operating loss carry-forwards of $142.9 million will expire at various dates from 2018 through 2035, if not utilized. We also had state income tax loss carry-forwards of $58.8 million at December 31, 2015. These carry-forwards will also expire at various dates from 2018 to 2035 if not utilized.

Discontinued Operations For The Years Ended December 31, 2015 and 2014.

During the third quarter of 2015, we decided to divest our Genetic Assays and Platforms business, resulting in a strategic shift that will have a major effect on our operations and financial results. Therefore, the divested Genetic Assays and Platforms operations meet the criteria to be reported as discontinued operations.

During the fourth quarter of 2015, our Board of Directors took actions to begin the process of divesting our Patient Testing business located in New Haven, Connecticut. In March of 2016, we announced that we had suspended testing services in our Patient Testing laboratory as we review and evaluate various strategic alternatives for that business. As a result of these actions, as of December 31, 2015, our Patient Testing business meets the criteria to be reported as discontinued operations.

The related assets, liabilities, results of operations and cash flows for both the Genetic Assays and Platforms business and Patient Testing business are classified as assets held for sale, liabilities held for sale and discontinued operations for all periods presented.

Revenues and net income (loss) of the discontinued operations consisted of the following:

	Year ended December 31,	
(in thousands)	2015	2014
Net sales	$18,584	$25,843
Operating loss from discontinued operations, before gain or loss on sale of business and tax	$(23,240)	$(6,753)
(Loss) Gain on sale of business	(224)	4,114
Income tax (benefit) expense	(648)	524
Loss from discontinued operations, net of tax	$(22,816)	$(3,163)

Liquidity and Capital Resources
Our working capital positions at December 31, 2015 and 2014 were as follows (in thousands):

	December 31,		
	2015	2014	Change
Current assets (including cash and cash equivalents of $444 and $1,609 respectively)	$3,282	$28,566	$(25,284)
Current liabilities	16,981	11,986	(4,995)
Working capital	$(13,699)	$16,580	$(30,279)

Convertible Notes Private Placement

We entered into an Unsecured Convertible Promissory Note Purchase Agreement (the "Note Purchase Agreement"), dated December 31, 2014, with an accredited investor (the "Initial Investor"), pursuant to which we issued and sold, on December 31, 2014, to the Initial Investor in a private placement an unsecured convertible promissory note (the "Initial Note") in the aggregate principal amount of $750,000. The Initial Note converted in full into 502,786 shares of our common stock, in accordance with the terms of the Initial Note.

Pursuant to the terms of the Note Purchase Agreement, on January 15, 2015, we entered into the Note Purchase Agreement with seven additional accredited investors (the "Additional Investors") and issued and sold, on January 20, 2015, to the Additional Investors in a private placement notes in an aggregate principal amount of $925,000 (the "Additional Notes" and, together with the Initial Note, the "2015 Notes"). As of December 31, 2015, $400,000 of the aggregate principal amount of the Additional Notes had been converted into an aggregate of 281,023 shares of our common stock

The 2015 Notes accrue interest at a rate of 6% per year and mature on December 31, 2016. Under the terms of each of the 2015 Notes, the outstanding principal and unpaid interest accrued is convertible into shares of our common stock as follows: (i) commencing upon the date of issuance of the 2015 Notes (but no earlier than January 1, 2015), the investor holding such 2015 Note became entitled to convert, on a one-time basis, up to 50% of the outstanding principal and unpaid interest accrued under the 2015 Note, into shares of our common stock at a conversion price equal to the lesser of (a) the average closing price of the common stock on the principal securities exchange or securities market on which our common stock is then traded (the "Market") for the 20 consecutive trading days immediately preceding the date of conversion, and (b) $2.20 (subject to adjustment for stock splits, stock dividends, other distributions, recapitalizations and the like); and (ii) commencing February 15, 2015, the investor holding such 2015 Note is entitled to convert, on a one-time basis, any or all of the remaining outstanding principal and unpaid interest accrued under the 2015 Note, into shares of our common stock at a conversion price equal to 85% of the average closing price of our common stock on the Market for the 15 consecutive trading days immediately preceding the date of conversion.

Craig-Hallum acted as the sole placement agent for the sale and issuance of the Additional Notes. In connection with the sale and issuance of the Additional Notes, we issued to Craig-Hallum an unsecured convertible promissory note, upon the same terms and conditions as the Notes, in an aggregate principal amount equal to 5% of the proceeds received by us pursuant to the sale and issuance of the Additional Notes, or $46,250. As of the date of filing of this Annual Report, the Placement Agent Note remains outstanding.

Underwritten Public Offering

On February 27, 2015, we entered into a purchase agreement with Craig-Hallum Capital Group LLC, as the underwriter (the "Underwriter"), pursuant to which we sold 3,573,899 shares of our common stock and corresponding warrants to purchase up to 714,780 shares of our common stock. Each share of common stock was sold in combination with a warrant to purchase 0.20 of a share of our common stock. The purchase price to the public for each share of common stock and accompanying warrant was $1.95.

The purchase price paid by the Underwriter to us for each share of common stock and the accompanying warrants was $1.8135. The net proceeds, after deducting the Underwriter's discount and other estimated expenses, were approximately $6.2 million.

2015 Private Placement

On June 30, 2015, we entered into a Securities Purchase Agreement with certain accredited investors (the "July 2015 Investors") pursuant to which, on July 7, 2015, we sold to the July 2015 Investors, and the July 2015 Investors purchased from us, (i) an aggregate of approximately 1.5 million shares of our common stock at a price per share of $1.42, (ii) warrants (the "Series B Warrants") to purchase up to an aggregate of 0.7 million shares of our common stock with an exercise price of $0.01 per share, and (iii) warrants (the "Series A Warrants" and, together with the Series B Warrants, the "July 2015 Warrants") to purchase up to an aggregate of 1.2 million shares of our common stock, with an exercise price of $1.66 per share (collectively, the "July 2015 Offering"). The purchase price for the Series B Warrants was $1.42 per share of our common stock subject to the Series B Warrants. Each of the July 2015 Warrants has a term of 5 and 1/2-years. The Series B Warrants are immediately exercisable. The Series A Warrants will be exercisable

beginning on January 7, 2016, six months from the date of issuance. The aggregate gross proceeds to us from the July 2015 Offering were approximately $3.0 million.

Craig-Hallum Capital Group LLC (the "2015 Placement Agent") served as the sole placement agent for the July 2015 Offering. In consideration for services rendered as the placement agent in the July 2015 Offering, we (i) paid to the 2015 Placement Agent cash commissions equal to approximately $212,783, or 7.0% of the gross proceeds received in the July 2015 Offering; (ii) issued to the 2015 Placement Agent a five-year warrant to purchase up to 107,033 shares of our common stock with an exercise price of $1.66 per share and which is subject to other terms that are the same as the terms of the Series A Warrants; and (iii) reimbursed the 2015 Placement Agent for reasonable out-of-pocket expenses, including fees paid to the 2015 Placement Agent's legal counsel, incurred in connection with the July 2015 Offering, which reimbursable expenses did not exceed $50,000.

Asset Sales

On September 8, 2015, we entered into an Asset Purchase Agreement (the "Asset Purchase Agreement") with Edge BioSystems, Inc. ("Columns Buyer"), pursuant to which we agreed to sell to Columns Buyer, and Columns Buyer agreed to purchase from us, our manufacturing, marketing and selling of high quality polymer and silica based beads and resin and chromatography columns business (collectively, the "Columns Business"). Pursuant to the Asset Purchase Agreement, Columns Buyer acquired substantially all of the assets used solely in connection with the Columns Business and assumed certain liabilities of the Columns Business for a total cash purchase price of approximately $2.1 million (the "Asset Sale"), which was paid on September 8, 2015 upon the closing of the asset sale.

On November 25, 2015, we entered into an Asset Purchase Agreement (the "Purchase Agreement") with ADSTEC Corporation ("ADSTEC") and ADS Biotec Inc., a wholly-owned subsidiary of ADSTEC ("ADS Biotec"), pursuant to which we sold (1) to ADSTEC our facilities located in Glasgow, Scotland and on Irvington Road in Omaha, Nebraska (together, the "Facilities") and all of our stock, inventory and raw materials located at the Facilities (collectively, the "Inventory"), and (2) to ADS Biotec (a) all of the remaining assets relating to our Genetic Assays and Platforms business segment (the "Business"), other than the Inventory (the "Purchased Assets"), and (b) all of the ordinary shares of Transgenomic Limited, a wholly-owned subsidiary of the ours (the "Shares"). The Purchase Agreement supersedes the binding term sheet between us and ADSTEC, effective as of September 30, 2015, as disclosed in our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 30, 2015.

Pursuant to the Purchase Agreement, ADSTEC and ADS Biotec acquired the Facilities, the Inventory, the Purchased Assets and the Shares for an aggregate purchase price of approximately $300,000, and ADS Biotec assumed our financial and human resources commitments related to the Business.

Conversion Agreement

On January 6, 2016, we entered into a Conversion Agreement (the "Conversion Agreement") with the holders (the "Preferred Holders") of all of our outstanding shares of Series A Convertible Preferred Stock (the "Series A Preferred"), and Series B Convertible Preferred Stock (the "Series B Preferred"), pursuant to which, among other things, the Preferred Holders: (1) elected to convert all of the outstanding shares of Series A Preferred and Series B Preferred into shares of our common stock in each case in accordance with the terms thereof, and (2) agreed that all accrued and unpaid dividends on the Series A Preferred and Series B Preferred would be paid by us in shares of common stock at a rate of $1.00 per share of common stock (collectively, the "Conversion").

The outstanding shares of Series A Preferred were convertible into shares of common stock at a rate of 1-for-3, and the outstanding shares of Series B Preferred were convertible into shares of common stock at a rate of 1-for-1. Prior to the entry into the Conversion Agreement, there were 2,586,205 shares of Series A Preferred outstanding, which were converted into 862,057 shares of common stock, and 1,443,297 shares of Series B Preferred outstanding, which were converted into 1,443,297 shares of common stock, for an aggregate of 2,305,354 shares of common stock issued upon conversion of the Series A Preferred and Series B Preferred. At the time of the entry into the Conversion Agreement, there were $3,681,591.90 in accrued and unpaid dividends on the outstanding shares of Series A Preferred, which were converted, in accordance with the Conversion Agreement, into 3,681,590 shares of common stock, and $793,236.17 in accrued and unpaid dividends on the outstanding shares of Series B Preferred, which were converted, in accordance with the terms of the Conversion Agreement, into 793,235 shares of common stock, for an aggregate of 4,474,825 shares of Common Stock issued pursuant to the accrued and unpaid dividends on the Series A Preferred and Series B Preferred. Therefore, in connection with the full conversion of the Series A Preferred and Series B Preferred, plus the conversion of all accrued and unpaid dividends thereon, we issued an aggregate of 6,780,179 shares of common Stock to the Preferred Holders on January 6, 2016.

January 2016 Private Placement

On January 6, 2016, we entered into a Securities Purchase Agreement (the "A-1 Preferred Purchase Agreement") with certain accredited investors (the "A-1 Preferred Investors"), pursuant to which, on January 8, 2016, we sold to the A-1 Preferred Investors, and the A-1 Preferred Investors purchased from us (the "A-1 Preferred Offering"), an aggregate of approximately $2.2 million of units (the "Units") consisting of (1) an aggregate of 2,365,243 shares (the "A-1 Preferred Shares") of our Series A-1 Convertible Preferred Stock (the "A-1 Preferred"), and (2) warrants (the "Warrants") to purchase up to an aggregate of 1,773,929 shares of our common stock. Each Unit was sold to the A-1 Preferred Investors at a purchase price of $0.93 per Unit. The A-1 Preferred Shares are convertible into shares of common stock at an initial rate of 1-for-1, which conversion rate is subject to further adjustment as set forth in our Certificate of Designation of Series A-1 Convertible Preferred Stock, which was filed with the Secretary of State of the State of Delaware on January 8, 2016 (the "Series A-1 Certificate of Designation"). Pursuant to the terms of the Series A-1

Certificate of Designation, the holders of the A-1 Preferred Shares will generally be entitled to that number of votes as is equal to the product obtained by multiplying: (a) the number of whole shares of common stock into which the A-1 Preferred may be converted as of the record date of such vote or consent, by (b) 0.93, rounded down to the nearest whole number. Therefore, every 1.075269 shares of A-1 Preferred will generally initially be entitled to one vote.

The Warrants are immediately exercisable, have a term of five years and have an exercise price of $1.21 per share of common stock. Each Warrant also includes both cash and cashless exercise features and an exchange feature whereby the holder of the Warrant may exchange all or any portion of the Warrant for a number of shares of Common Stock equal to the quotient obtained by dividing the "Exchange Amount" by the closing bid price of the Common Stock on the second trading day prior to the date the Warrant is exchanged (the "Exchange Right"). Under the Warrants, the "Exchange Amount" is based upon a Black Scholes option pricing model, and the aggregate Exchange Amount under all of the Warrants will be $1,436,882, subject to adjustment to the extent that the risk-free U.S. Treasury rate fluctuates between the date of issuance of the Warrants and the date the Warrants are exchanged. Each Warrant provides that the number of shares that may be issued upon exercise of the Exchange Right is limited to the number of shares that may be purchased pursuant to the terms of the Warrant, unless the Company has previously obtained stockholder approval or approval from The Nasdaq Stock Market LLC to issue any additional shares of Common Stock (the "Additional Shares") pursuant to the Exchange Right (the "Required Approvals"). For any Exchange Right exercised more than 90 days following the issuance of the Warrants, if the Company has not obtained either of the Required Approvals, the Company will be required to pay the Warrant holder an amount in cash for any Additional Shares that it cannot issue without the Required Approvals based on the Exchange Amount.

Please see the section entitled "Contractual Obligations and Other Commitments" that follows in this Annual Report and Footnote 6 "Debt" to our accompanying consolidated financial statements for additional information regarding our outstanding debt and debt servicing obligations.

At December 31, 2015, we had cash and cash equivalents of $0.4 million. As described above, in January 2016 we received approximately $2.2 million in gross proceeds in connection with the issuance and sale of preferred stock and common stock warrants. Our current operating plan projects improved operating results, improvement in collection rates and monetization of underutilized assets. As with any operating plan, there are risks associated with our ability to execute it. Therefore, there can be no assurance that we will be able to satisfy our obligations, or achieve the operating improvements as contemplated by the current operating plan. If we are unable to execute this plan, we will need to find additional sources of cash not contemplated by the current operating plan and/or raise additional capital to sustain continuing operations as currently contemplated. We could raise additional funds through various potential sources such as through the sale of assets or sale of debt or equity securities. However, there can be no assurance that the additional funding sources will be available to us at reasonable terms or at all. If we are unable to achieve our operating plan or obtain additional financing, our business would be jeopardized and we may not be able to continue as a going concern.

Analysis of Cash Flows From Continuing Operations

The following table presents a summary of our cash flows from continuing operations:

	(amounts in thousands)	
	2015	2014
Net cash provided by (used in):		
Operating activities	$(7,854)	$(6,169)
Investing activities	(423)	(175)
Financing activities	8,991	10,070
Net increase in cash and cash equivalents, from continuing operations	$714	$3,726

Net Increase in Cash and Cash Equivalents. Cash and cash equivalents increased by $0.7 million and $3.7 million for the periods ended December 31, 2015 and 2014, respectively.

Cash Flows Used In Operating Activities. In 2015, cash flows used in operating activities of $7.9 million reflects the Company's net loss from continuing operations of $10.1 million and an increase in prepaid and other current assets of $0.6 million. These were offset by an increase in accrued expenses of $1.8 million and increases in non-cash items,

including stock compensation expense of $0.6 million and depreciation and amortization of $0.5 million. During 2014, the cash flows used in operating activities of $6.2 million includes our loss from operations of $10.8 million. This was partially offset by an increase in non-cash items of $1.4 million and by an increase in accounts payable and accrued expenses of $3.0 million.

Cash Flows Used In Investing Activities. Cash flows used in investing activities totaled $0.4 million for the year ended December 31, 2015 and includes purchases of property and equipment of $0.2 million. Cash flows used in investing activities totaled $0.2 million for the year ended December 31, 2014 and includes purchases of property and equipment of $0.1 million.

Cash Flows Provided By Financing Activities. Cash flows provided by financing activities totaled $9.0 million for the year ended December 31, 2015, which included net proceeds of approximately $9.0 million from our common stock offerings during the year and $0.9 million from the issuance of unsecured convertible promissory notes in January 2015. These proceeds were partially offset by payments on our debt and capital lease obligations. Cash flows provided by financing activities for the year ended December 31, 2014 included proceeds from the issuance of Series B Convertible Preferred Stock of $6.9 million, net proceeds of $2.4 million from the October 2014 issuance of common stock and proceeds of $0.8 million from the issuance of an unsecured convertible promissory note in December 2014.

Contractual Obligations and Other Commitments

At December 31, 2015, our contractual obligations and other commitments were as follows:

	(Amounts in thousands)						
	2016	2017	2018	2019	2020	After 2020	Total
Long term debt[1]	$7,596	$—	$—	$—	$—	$—	$7,596
Interest[1]	510	—	—	—	—	—	510
Capital lease obligations[2]	3	1	—	—	—	—	4
Operating lease obligations[3]	727	724	711	676	680	388	3,906
Purchase obligations[4]	332	—	—	—	—	—	332
	$9,168	$725	$711	$676	$680	$388	$12,348

(1) See Note 6 - "Debt" to our accompanying consolidated financial statements.
(2) See Note 7 - "Capital Leases" to our accompanying consolidated financial statements.
(3) These amounts represent non-cancellable operating leases for equipment, vehicles and operating facilities
(4) These amounts represent purchase commitments, including all open purchase orders

At December 31, 2015, we had unrecognized tax benefits of $0.1 million. A reasonable estimate of the timing related to the $0.1 million is not possible.

Off Balance Sheet Arrangements

At December 31, 2015 and 2014, we did not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Critical Accounting Policies

Accounting policies used in the preparation of the consolidated financial statements may involve the use of management judgments and estimates. Certain of our accounting policies are considered critical as they are both important to the portrayal of our financial statements and require significant or complex judgments on the part of management. The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses during the reported period. In addition, estimates and assumptions associated with the determination of the fair value of certain assets and related impairments require considerable judgment by management. Our judgments and estimates are based on experience and assumptions that we believe are reasonable under the circumstances. Further, we evaluate our judgments and estimates from time to time as circumstances change. Actual financial results based on judgments or estimates may

vary under different assumptions or circumstances. The following are certain critical accounting policies that may involve the use of judgments or estimates.

Allowance for Doubtful Accounts and Contractual Allowances.
While payment terms are generally 30 days, we have also provided extended payment terms of up to 90 days in certain cases. We operate globally and some of the international payment terms can be greater than 90 days. Accounts receivable are carried at

original invoice amount and shown net of allowance for doubtful accounts and contractual allowances. The estimate made for doubtful accounts is based on a review of all outstanding amounts on a quarterly basis. The estimate for contractual allowances is based on contractual terms or historical reimbursement rates and is recorded when revenue is recorded. We determine the allowance for doubtful accounts and contractual allowances by regularly evaluating individual payor receivables and considering a payor's financial condition, credit history, reimbursement rates and current economic conditions. Accounts receivable are written off when deemed uncollectible and after all collection efforts have been exhausted. Recoveries of accounts receivable previously written off are recorded as a reduction in bad debt expense when received.

Inventories.
Inventories are stated at the lower of cost or market net of allowance for obsolete and slow moving inventory. Cost is computed using standard costs for finished goods and average or latest actual cost for raw materials and work in process, which approximates the first-in, first-out (FIFO) method. We write down slow-moving and obsolete inventory by the difference between the value of the inventory and our estimate of the reduced value based on potential future uses, the likelihood that overstocked inventory will be sold and the expected selling prices of the inventory. If our ability to realize value on slow-moving or obsolete inventory is less favorable than assumed, additional write-downs of the inventory may be required.

Property and Equipment.
Property and equipment are carried at cost. Depreciation is computed by the straight-line method over the estimated useful lives of the related assets.

Goodwill and Intangible Assets.
Intangible assets include intellectual property, patents and acquired products.
1. Intellectual Property. Initial costs paid to license intellectual property from independent third parties are capitalized and amortized using the straight-line method over the license period. Ongoing royalties related to such licenses are expensed as incurred.
2. Patents. We capitalize legal costs, filing fees and other expenses associated with obtaining patents on new discoveries and amortize these costs using the straight-line method over the shorter of the legal life of the patent or its economic life beginning on the date the patent is issued.
3. Acquired Products. As part of the FAMILION acquisition and acquisition of certain intangible assets from Axial, the Company acquired technology, in process technology, trademarks/tradenames, customer relationships, covenants not to compete and third party relationships. These costs will be amortized pursuant to the straight-line method over their estimated economic life of seven to fifteen years. See Footnote 5 "Intangible Assets and Other Assets".
Goodwill is tested for impairment annually. We perform this impairment analysis during the fourth quarter of each year or whenever events indicate that the carrying amount of goodwill may not be recoverable. We test our intangible assets for impairment when factors are present that indicate the carrying value of an intangible asset (group) may not be recoverable. Impairment occurs when the carrying value is determined to be not recoverable, thereby causing the carrying value of the goodwill or intangible asset (group) to exceed its fair value. If impaired, the asset's carrying value is reduced to its fair value. We performed an interim testing of impairment of goodwill and long-lived assets as of September 30, 2015, due to the significant decline in the market price of our stock. As a result of this testing, we recorded impairment charges of $6.2 million related to our long-lived assets during the three months ended September 30, 2015 but determined that no impairment of goodwill was needed to be recorded. See Note 5 - "Intangibles and Other Assets" for further discussion regarding the impairment of our long-lived assets. During the fourth quarter of 2015, it was concluded that our Patient Testing business which met the criteria to be classified as held for sale and reported as discontinued operations as December 31, 2015 was impaired due to continued declines in financial performance and due to the fact that the likelihood of recoverability of the Patient Testing goodwill through sale of the Patient Testing business was remote. As a result we determined that the goodwill related to the Patient Testing business was impaired as of December 31, 2015. Goodwill impairment charges of $6.9 million were recorded during

the three months ended December 31, 2015. The goodwill and impairment charges are included in the results of our discontinued operations. See Note 3 - “Discontinued Operations” for further discussion regarding the results of discontinued operations.

Common Stock Warrants.
Our issued and outstanding 2012 warrants to purchase common stock do not qualify to be treated as equity, and accordingly, are recorded as a liability (“Common Stock Warrant Liability”). The Common Stock Warrant Liability was initially recorded at fair value using a Monte Carlo simulation model. We are required to present these instruments at fair value at each reporting date

and any changes in fair values are recorded as an adjustment to earnings. The Common Stock Warrant Liability is considered a level three financial instrument. See Footnote 13 “Fair Value” to our accompanying consolidated financial statements.

Stock Based Compensation.
All stock-based awards to date have exercise prices equal to the market price of our common stock on the date of grant and have ten-year contractual terms. Unvested awards as of December 31, 2015 had vesting periods of one or three years from date of grant. None of the stock awards outstanding at December 31, 2015 are subject to performance or market-based vesting conditions.
We measure and recognize compensation expense for all stock-based awards made to employees and directors, including stock options. Compensation expense is based on the calculated fair value of the awards as measured at the grant date for stock options and for Stock Appreciation Rights (“SAR”) is based on the calculated mark-to-market value of the awards at quarter end, with both expensed over the service period of the awards. The values are determined using the Black-Scholes methodology.

Income Taxes.
Deferred tax assets and liabilities are determined based on the differences between the financial reporting and tax basis of assets and liabilities at each balance sheet date using tax rates expected to be in effect in the year the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance to the extent that it is more likely than not that they will not be realized. Our liability for uncertain tax positions was $0.1 million and $0.1 million as of December 31, 2015 and 2014, respectively. We recorded less than $0.1 million of additional uncertain tax positions during each of the years ended 2015 and 2014. We recorded zero and $0.2 million for reductions in uncertain tax positions relating to statute of limitations lapse for the years ended 2015 and 2014, respectively. We had no material interest or penalties during fiscal 2015 or fiscal 2014, and we do not anticipate any such items during the next twelve months. Our policy is to record interest and penalties directly related to uncertain tax positions as income tax expense in the Consolidated Statements of Operations.

Net Sales Recognition.
Revenue is realized and earned when all of the following criteria are met:
- Persuasive evidence of an arrangement exists;
- Delivery has occurred or services have been rendered;
- The seller’s price to the buyer is fixed or determinable; and
- Collectability is reasonably assured.

In our Biomarker Identification laboratory, we perform services on a project by project basis. When we receive payment in advance, we recognize revenue when we deliver the service. These projects typically do not extend beyond one year.

Net sales from Patient Testing laboratories are recognized on an individual test basis and take place when the test report is completed, reviewed and sent to the client less the reserve for insurance, Medicare and Medicaid contractual adjustments. There are no deferred net sales associated with our Patient Testing services. Adjustments to the allowances, based on actual receipts from third party payers, are reflected in the estimated contractual allowance applied prospectively. In the fourth quarter of 2015, we adjusted our contractual allowance rates to better reflect the reimbursement level we expect to achieve on Patient Testing billings. The adjustment negatively impacted our fourth quarter of 2015 Patient Testing revenues. Our Patient Testing revenues are reported as part of discontinued operations (See Note 3 - “Discontinued Operations”).
Net sales of Genetic Assays and Platforms products, reported as discontinued operations (See Note 3 - “Discontinued Operations”) are recognized in accordance with the terms of the sales arrangement. Such recognition is based on receipt of an unconditional customer order and transfer of title and risk of ownership to the customer, typically upon shipment

of the product under a purchase order. Our sales terms do not provide for the right of return unless the product is damaged or defective. Net sales from certain services associated with the analytical instruments, to be performed subsequent to shipment of the products, is deferred and recognized when the services are provided. Such services, mainly limited to installation and training services that are not essential to the functionality of the instruments, typically are performed in a timely manner subsequent to shipment of the instrument. We also enter into various service contracts that cover installed instruments. These contracts cover specific time periods and net sales associated with these contracts are deferred and recognized ratably over the service period.
Taxes collected from customers and remitted to government agencies for specific net sales producing transactions are recorded net with no effect on the income statement.

Research and Development.
Research and development and various collaboration costs are charged to expense when incurred.

Translation of Foreign Currency.

Our foreign subsidiary uses the local currency of the country in which it is located as its functional currency. Its assets and liabilities are translated into U.S. dollars at the exchange rates in effect at the balance sheet date. Revenues and expenses are translated at the average rates during the period. The effects of these exchange rate differences are recorded in the Statement of Comprehensive Loss

Comprehensive Income.
Accumulated other comprehensive income at December 31, 2015 and 2014 consisted of foreign currency translation adjustments.

Loss Per Share.
Basic earnings per share is calculated based on the weighted-average number of common shares outstanding during each period. Diluted earnings per share include shares issuable upon exercise of outstanding stock options, warrants or conversion rights that have exercise or conversion prices below the market value of our common stock.

Recent Accounting Pronouncements
In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-09, Revenue from Contracts with Customers. This guidance requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to a customer. ASU No. 2014-09 will replace most existing revenue recognition guidance in generally accepted accounting principles in the U.S. when it becomes effective. In July 2015, the FASB decided to defer the effective date of this new accounting guidance by one year. As a result, ASU No. 2014-09 will be effective for us for all annual and interim reporting periods beginning after December 15, 2017 and early adoption would be permitted as of the original effective date. The new standard permits the use of either the retrospective or cumulative effect transition method. We do not expect to early adopt this guidance and we have not selected a transition method. We are currently evaluating the impact this guidance will have on our financial condition, results of operations and cash flows.

In August 2014, the FASB issued ASU No. 2014-15, Presentation of Financial Statements - Going Concern (Subtopic 205-40). The new guidance addresses management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related footnote disclosures. The standard will be effective for the first interim period within annual reporting periods beginning after December 15, 2016. Early adoption is permitted. We do not expect to early adopt this guidance and do not believe that the adoption of this guidance will have a material impact on our consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-03, Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, which requires that debt issuance costs be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability, rather than as a deferred charge asset. ASU No. 2015-03 became effective for us on January 1, 2016. ASU No. 2015-03 is not expected to have a material impact on our financial condition, results of operations or cash flows.

In February 2016, the FASB issued an ASU, “Leases”. The new standard amends the recognition of lease assets and lease liabilities by lessees for those leases currently classified as operating leases and amends disclosure requirements associated with leasing arrangements. The new standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018. Early adoption is permitted. The new standard must be adopted using a modified retrospective transition, and provides for certain practical expedients. Transition will require application of the new guidance at the beginning of the earliest comparative period presented. We are currently assessing the impact of the adoption of this ASU will have on our consolidated financial statements.

Impact of Inflation

We do not believe that inflation has had a material effect on our current business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, for example, if the cost of our materials or the cost of shipping our products to customers were to incur substantial increases as a result of the rapid rise in the cost of oil, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

Item 7A. Quantitative and Qualitative Disclosure about Market Risk.

We are a smaller reporting company, as defined by Rule 12b-2 of the Securities Exchange Act of 1934, as amended, and are not required to provide the information required under this item.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders
Transgenomic, Inc.

We have audited the accompanying consolidated balance sheets of Transgenomic, Inc. and Subsidiary (the Company) as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive loss, stockholders' equity (deficit) and cash flows for each of the two years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Transgenomic, Inc. and Subsidiary at December 31, 2015 and 2014, and the consolidated results of their operations and their cash flows for each of the two years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has recurring losses from operations that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Ernst & Young LLP

Hartford, Connecticut
April 14, 2016

TRANSGENOMIC, INC. AND SUBSIDIARY
CONSOLIDATED BALANCE SHEETS
December 31, 2015 and 2014
(Dollars in thousands except per share data)

	2015	2014
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$444	$1,609
Accounts receivable, net	264	466
Inventories, net	50	—
Other current assets	537	385
Assets held for sale	1,987	26,106
Total current assets	3,282	28,566
PROPERTY AND EQUIPMENT:		
Equipment	5,593	5,599
Furniture, fixtures & leasehold improvements	1,565	1,566
	7,158	7,165
Less: accumulated depreciation	(6,899)	(6,680)
	259	485
OTHER ASSETS:		
Intangibles, net	1,170	751
Other assets	105	204
	$4,816	$30,006
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Current maturities of long term debt	$7,596	$462
Accounts payable	3,781	3,898
Accrued compensation	321	377
Accrued expenses	3,734	2,045
Deferred revenue	217	298
Other current liabilities	1,068	1,068
Liabilities held for sale	264	3,838
Total current liabilities	16,981	11,986
LONG TERM LIABILITIES:		
Long term debt less current maturities	—	7,375
Common stock warrant liability	350	145
Other long-term liabilities	305	817
Accrued preferred stock dividend	—	3,130
Total liabilities	17,636	23,453
STOCKHOLDERS' (DEFICIT) EQUITY:		
Preferred stock, $.01 par value, 15,000,000 shares authorized, 4,029,502 shares issued and outstanding	40	40
Common stock, $.01 par value, 150,000,000 shares authorized, 13,915,691 and 8,084,471 shares issued and outstanding, respectively (1)	139	81
Additional paid-in capital (1)	200,403	189,680
Accumulated other comprehensive income	10	340
Accumulated deficit	(213,412)	(183,588)
Total stockholders' (deficit) equity	(12,820)	6,553

	$4,816	$30,006

(1) The common stock shares and additional paid-in capital for all periods presented reflect the one-for-twelve reverse stock split which took effect on January 27, 2014.

See notes to consolidated financial statements.

TRANSGENOMIC, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF OPERATIONS
Years Ended December 31, 2015 and 2014
(Dollars in thousands except per share data)

	2015	2014
NET SALES	$1,653	$1,240
COST OF GOODS SOLD	1,940	2,175
Gross profit	(287)	(935)
OPERATING EXPENSES:		
Selling, general and administrative	7,055	7,385
Research and development	1,853	2,249
	8,908	9,634
OPERATING LOSS FROM CONTINUING OPERATIONS	(9,195)	(10,569)
OTHER INCOME (EXPENSE):		
Interest expense, net	(724)	(665)
Warrant revaluation	(205)	455
Other, net	(14)	—
	(943)	(210)
LOSS FROM CONTINUING OPERATIONS BEFORE INCOME TAXES	(10,138)	(10,779)
INCOME TAX EXPENSE (BENEFIT)	—	—
LOSS FROM CONTINUING OPERATIONS	$(10,138)	$(10,779)
LOSS FROM DISCONTINUED OPERATIONS, NET OF TAXES	(22,816)	(3,163)
NET LOSS	(32,954)	(13,942)
PREFERRED STOCK DIVIDENDS	(1,324)	(1,144)
NET LOSS FROM CONTINUING OPERATIONS AVAILABLE TO COMMON STOCKHOLDERS	$(11,462)	$(11,923)
NET LOSS FROM DISCONTINUED OPERATIONS AVAILABLE TO COMMON STOCKHOLDERS	$(22,816)	$(3,163)
NET LOSS AVAILABLE TO COMMON STOCKHOLDERS	$(34,278)	$(15,086)
BASIC AND DILUTED LOSS PER COMMON SHARE FROM CONTINUING OPERATIONS (1)	$(0.93)	$(1.59)
BASIC AND DILUTED LOSS PER COMMON SHARE FROM DISCONTINUED OPERATIONS (1)	$(1.85)	$(0.42)
BASIC AND DILUTED LOSS PER COMMON SHARE (1)	$(2.78)	$(2.01)
BASIC AND DILUTED WEIGHTED AVERAGE SHARES OF COMMON STOCK OUTSTANDING (1)	12,321,739	7,493,844

(1) Net loss per share and the number of shares used in the per share calculations for all periods presented reflect the one-for-twelve reverse stock split which took effect on January 27, 2014.
See notes to consolidated financial statements.

TRANSGENOMIC, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
Years Ended December 31, 2015 and 2014
(Dollars in thousands)

	2015	2014
Net Loss	$(32,954)	$(13,942)
Other Comprehensive Loss; foreign currency translation adjustment	(330)	(50)
Comprehensive Loss	$(33,284)	$(13,992)

See notes to consolidated financial statements.

TRANSGENOMIC, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
Years Ended December 31, 2015 and 2014
(Dollars in thousands except share data)

	Preferred Stock		Common Stock					
	Outstanding Shares	Par Value	Outstanding Shares (1)	Par Value (1)	Additional Paid-in Capital (1)	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
Balance, December 31, 2013	2,586,205	$26	7,353,695	$73	$179,459	$ (168,502)	$ 390	$11,446
Net loss	—	—	—	—	—	(13,942)		(13,942)
Foreign currency translation adjustment	—	—	—	—	—	—	(50)	(50)
Non-cash stock-based compensation	—	—	—	—	977	—	—	977
Private Placement, net	—	—	730,776	8	2,353	—	—	2,361
Preferred stock agreement	1,443,297	14	—	—	6,891	—	—	6,905
Dividends on preferred stock	—	—	—	—	—	(1,144)	—	(1,144)
Balance, December 31, 2014	4,029,502	$40	8,084,471	$81	$189,680	$ (183,588)	$ 340	$6,553
Net loss	—	—	—	—	—	(32,954)		(32,954)
Foreign currency translation adjustment	—	—	—	—	—	—	(330)	(330)
Non-cash stock-based compensation	—	—	—	—	644	—	—	644
Private Placement, net	—		5,047,411	50	8,920			8,970
Conversion of convertible promissory notes	—	—	783,809	8	1,159	—	—	1,167
Reversal of dividends on preferred stock	—	—	—	—	—	3,130	—	3,130
Balance, December 31, 2015	4,029,502	$40	13,915,691	$139	$200,403	$ (213,412)	$ 10	$(12,820)

(1) The common stock shares and additional paid-in capital for all periods presented reflect the one-for-twelve reverse stock split which took effect on January 27, 2014.
See notes to consolidated financial statements.

TRANSGENOMIC, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years Ended December 31, 2015 and 2014
(Dollars in thousands)

	2015	2014
CASH FLOWS USED IN OPERATING ACTIVITIES:		
Net loss	$(32,954)	$(13,942)
Less loss from discontinued operations, net of tax	(22,816)	(3,163)
Loss from continuing operations	(10,138)	(10,779)
Adjustments to reconcile net loss to net cash flows used in operating activities:		
Depreciation and amortization	489	569
Non-cash, stock based compensation	611	939
Provision for losses on doubtful accounts	67	3
Provision for losses on inventory obsolescence	63	—
Warrant revaluation	205	(455)
Loss on disposal of fixed assets	14	—
Deferred interest	70	330
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	133	(183)
Inventories	(113)	—
Prepaid expenses and other current assets	(663)	357
Accounts payable	(365)	1,799
Accrued expenses and other liabilities	1,773	1,251
Net cash used in continuing operations	(7,854)	(6,169)
Net cash used in discontinued operations	(4,524)	(7,533)
Net cash used in operating activities	(12,378)	(13,702)
CASH FLOWS PROVIDED BY (USED IN) INVESTING ACTIVITIES:		
Purchase of property and equipment	(204)	(130)
Change in other assets	(219)	(45)
Net cash used in investing activities, continuing operations	(423)	(175)
Net cash provided by investing activities, discontinued operations	2,210	3,800
Net cash provided by investing activities	1,787	3,625
CASH FLOWS PROVIDED BY FINANCING ACTIVITIES:		
Proceeds from note payable	923	7,190
Principal payments on capital lease obligations	(35)	(144)
Issuance of preferred stock, net	—	9,266
Issuance of common stock and related warrants, net	8,977	—
Principal payments on note payable	(874)	(6,242)
Net cash flows provided by financing activities	8,991	10,070
EFFECT OF FOREIGN CURRENCY EXCHANGE RATE CHANGES ON CASH, discontinued operations	435	(10)
NET CHANGE IN CASH AND CASH EQUIVALENTS	(1,165)	(17)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	1,609	1,626
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$444	$1,609
SUPPLEMENTAL CASH FLOW INFORMATION		
Cash paid during the period for:		
Interest	$493	$229
SUPPLEMENTAL DISCLOSURE OF NON-CASH INFORMATION		

Note payable converted to Equity	1,012	—

38

See notes to consolidated financial statements.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

1. BUSINESS DESCRIPTION

Business Description.

Transgenomic, Inc. (“we”, “us”, “our”, the “Company” or “Transgenomic”) is a biotechnology company advancing personalize medicine for the detection and treatment of cancer and inherited diseases through our proprietary molecular technologies and clinical and research services. A key goal is to bring our Multiplexed ICE COLD-PCR (“MX-ICP”) product to the clinical market through strategic partnerships and licensing agreements, enabling the use of blood and other bodily fluids for more effective and patient-friendly diagnosis, monitoring and treatment of cancer.

MX-ICP is technology proprietary to Transgenomic. It is a reagent that improves the ability to detect genetic mutations. This technology has been validated internally on all currently available sequencing platforms, including Sanger, Next Gen Sequencing and Digital PCR. By enhancing the level of detection of genetic mutations and suppressing the normal or wild-type DNA, several benefits are provided.

Historically, our operations were organized and reviewed by management along our major product lines and presented in two business segments: Laboratory Services and Genetic Assays and Platforms. Beginning with the quarter ended September 30, 2015, our operations are now organized as one business segment, our Laboratory Services segment, and during the fourth quarter of 2015, we began including a portion of our Laboratory Services segment as discontinued operations.

Our current Laboratory Services business consists of our laboratory in Omaha, Nebraska, which is focused on providing genetic analytical services related to Oncology and pharmacogenomics research services supporting Phase II and Phase III clinical trials conducted by pharmaceutical and biotechnology companies. Our laboratory employs a variety of genomic testing service technologies, including our proprietary MX-ICP technology. Our laboratory in Omaha is certified under the Clinical Laboratory Improvement Amendment (“CLIA”) as a high complexity laboratory and is accredited by the College of American Pathologists.

Our consolidated balance sheets, statements of operations and statements of cash flows for all periods presented reflect our former Genetic Assays and Platforms activities and Patient Testing business as discontinued operations (See Note 3 - “Discontinued Operations”).

Going Concern

The consolidated financial statements have been prepared using accounting principles generally accepted in the United States of America applicable for a going concern which assumes that the Company will realize its assets and discharge its liabilities in the ordinary course of business. The Company has incurred substantial operating losses and has used cash in its operating activities for the past few years. As of December 31, 2015, the Company had negative working capital of approximately $13.7 million. During the first quarter of 2016, the Company received net proceeds of approximately $2.0 million from the issuance of preferred stock and common stock warrants. Including the recent financing, the Company’s ability to continue as a going concern is dependent upon a combination of generating additional revenue, improving cash collections, potentially selling underutilized assets and/or product lines related to discontinued operations and, if needed, raising necessary financing to meet its obligations and pay its liabilities arising from normal business operations when they come due. The outcome of these matters cannot be predicted with any certainty at this time and raises substantial doubt that the Company will be able to continue as a going concern. These consolidated financial statements do not include any adjustments to the amounts and classification of assets and

liabilities that may be necessary should the Company be unable to continue as a going concern. The Company cannot be certain that additional financing will be available on acceptable terms, or at all, and its failure to raise capital when needed could limit its ability to continue its operations.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation.

The consolidated financial statements include the accounts of Transgenomic, Inc. and its wholly owned subsidiary. All inter-company balances and transactions have been eliminated in consolidation.

Risks and Uncertainties.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

Certain risks and uncertainties are inherent in the Company's our day-to-day operations and to the process of preparing our financial statements. The more significant of those risks are presented below and throughout the notes to the financial statements.

Use of Estimates.

The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses during the reporting period. In addition, estimates and assumptions associated with the determination of the fair value of certain assets and related impairments require considerable judgment by management. The key estimates included in the consolidated financial statements include stock option valuations, goodwill and intangible valuations, accounts receivable and inventory valuations, warrant valuations and contractual allowances. Actual results could differ from the estimates and assumptions used in preparing these consolidated financial statements.

Basis of Presentation.

The accompanying consolidated financial statements are presented in conformity with U.S. generally accepted accounting principles ("GAAP"). All amounts are presented in U.S. Dollars ("$").Supplemental cash flows from discontinued operations are presented in Note 3 to the consolidated financial statements "Discontinued Operations." The Company has evaluated events occurring subsequent to December 31, 2015 for potential recognition or disclosure in the consolidated financial statements and concluded there were no subsequent events that required recognition or disclosure other than those provided in Note 15 "Subsequent Events".

On January 15, 2014, the Board of Directors of the Company approved a reverse split of the Company's common stock, par value $0.01, at a ratio of one-for twelve. This reverse stock split became effective on January 27, 2014 and, unless otherwise indicated, all share amounts, per share data, share prices, exercise prices and conversion rates set forth in these notes and the accompanying consolidated financial statements have, where applicable, been adjusted retroactively to reflect this reverse stock split.

Fair Value.

Unless otherwise specified, book value approximates fair market value. The Company's Level 1 financial instruments include cash and cash equivalents. The Company's Level 3 financial instruments include the common stock warrant liability, preferred stock warrant liability and conversion feature, and debt. Due to its variable interest component, debt approximates fair value. The common stock warrant liability and Series A Convertible Preferred Stock ("Series A Preferred Stock") warrant liability and conversion feature are recorded at fair value. See Note 13 "Fair Value".

Cash and Cash Equivalents and Other Current Assets.

Cash and cash equivalents include cash and investments with original maturities at the date of acquisition of three months or less. Such investments presently consist of temporary overnight investments.

Other current assets as of December 31, 2015 of $0.5 million includes prepaids of $0.2 million, unbilled receivables of $0.1 million and other receivables of $0.2 million.

Concentrations of Cash.

From time to time, we may maintain a cash position with financial institutions in amounts that exceed federally insured limits. We have not experienced any losses on such accounts as of December 31, 2015.

Accounts Receivable.

The following is a summary of activity for the allowance for doubtful accounts from continuing operations during the years ended December 31, 2015 and 2014:

Dollars in Thousands

	Beginning Balance	Provision	Write Offs	Ending Balance
Twelve months ended December 31, 2015	$20	$67	$—	$87
Twelve months ended December 31, 2014	$17	$3	$—	$20

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

While payment terms are generally 30 days, we have also provided extended payment terms of up to 90 days in certain cases. We operate globally and some of the international payment terms can be greater than 90 days. Accounts receivable are carried at original invoice amount and shown net of allowance for doubtful accounts and contractual allowances. The estimate made for doubtful accounts is based on a review of all outstanding amounts on a quarterly basis. The estimate for contractual allowances is based on contractual terms or historical reimbursement rates and is recorded when revenue is recorded. We determine the allowance for doubtful accounts and contractual allowances by regularly evaluating individual payor receivables and considering a payor's financial condition, credit history, reimbursement rates and current economic conditions. Accounts receivable are written off when deemed uncollectible and after all collection efforts have been exhausted. Recoveries of accounts receivable previously written off are recorded as a reduction in bad debt expense when received.

Inventories.

Inventories are stated at the lower of cost or market net of allowance for obsolete and slow moving inventory. Cost is computed using standard costs for finished goods and average or latest actual cost for raw materials and work in process, which approximates the first-in, first-out (FIFO) method. We write down slow-moving and obsolete inventory by the difference between the value of the inventory and our estimate of the reduced value based on potential future uses, the likelihood that overstocked inventory will be sold and the expected selling prices of the inventory. If our ability to realize value on slow-moving or obsolete inventory is less favorable than assumed, additional write-downs of the inventory may be required.

The following is a summary of activity for the allowance for obsolete inventory during the years ended December 31, 2015 and 2014:

	Dollars in Thousands			
	Beginning Balance	Provision	Write Offs	Ending Balance
Twelve months ended December 31, 2015	$—	$63	$—	$63
Twelve months ended December 31, 2014	$—	$—	$—	$—

We determine the allowance for obsolescence by evaluating inventory quarterly for items deemed to be slow moving or obsolete.

Property and Equipment.

Property and equipment are carried at cost. Depreciation is computed by the straight-line method over the estimated useful lives of the related assets as follows:

Leasehold improvements	1 to 10 years
Furniture and fixtures	3 to 7 years
Production equipment	3 to 7 years
Computer equipment	3 to 7 years
Research and development equipment	2 to 7 years

Depreciation expense related to property and equipment during the years ended December 31, 2015 and 2014 was $0.2 million and $0.3 million, respectively. Included in depreciation for each of the years ended December 31, 2015 and 2014 was $0.1 million related to equipment acquired under capital leases.

We test our property and equipment for impairment when factors are present that indicate the carrying value of an asset (group) may not be recoverable. As part of our review for impairment of long-lived assets at September 30, 2015, we recorded an impairment charge of approximately $0.8 million related to property and equipment during the three months ended September 30, 2015. See Note 5 - "Intangibles Assets and Other Assets" for further discussion regarding the impairment of our long-lived assets.

Goodwill and Intangible Assets.
Intangible assets include intellectual property, patents and acquired products.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

1. Intellectual Property. Initial costs paid to license intellectual property from independent third parties are capitalized and amortized using the straight-line method over the license period. Ongoing royalties related to such licenses are expensed as incurred.
2. Patents. We capitalize legal costs, filing fees and other expenses associated with obtaining patents on new discoveries and amortize these costs using the straight-line method over the shorter of the legal life of the patent or its economic life beginning on the date the patent is issued.
3. Acquired Products. As part of the FAMILION acquisition and acquisition of certain intangible assets from Axial, the Company acquired technology, in process technology, trademarks/tradenames, customer relationships, covenants not to compete and third party relationships. These costs will be amortized pursuant to the straight-line method over their estimated economic life of seven to fifteen years. See Footnote 5 “Intangible Assets and Other Assets”.
Goodwill is tested for impairment annually. We perform this impairment analysis during the fourth quarter of each year or whenever events indicate that the carrying amount of goodwill may not be recoverable. We test our intangible assets for impairment when factors are present that indicate the carrying value of an intangible asset (group) may not be recoverable. Impairment occurs when the carrying value is determined to be not recoverable, thereby causing the carrying value of the goodwill or intangible asset (group) to exceed its fair value. If impaired, the asset’s carrying value is reduced to its fair value. We performed an interim testing of impairment of goodwill and long-lived assets as of September 30, 2015, due to the significant decline in the market price of our stock. As a result of this testing, we recorded impairment charges of $6.2 million related to our long-lived assets during the three months ended September 30, 2015 but determined that no impairment of goodwill was needed to be recorded. See Note 5 - “Intangibles and Other Assets” for further discussion regarding the impairment of our long-lived assets. During the fourth quarter of 2015, it was concluded that our Patient Testing business, which met the criteria to be classified as held for sale and reported as discontinued operations as of December 31, 2015, was impaired due to continued declines in financial performance and due to the fact that the likelihood of recoverability of the Patient Testing goodwill through sale of the Patient Testing business was remote. As a result we determined that the goodwill related to the Patient Testing business was impaired as of December 31, 2015. Goodwill impairment charges of $6.9 million were recorded during the three months ended December 31, 2015. The goodwill and impairment charges are included in the results of our discontinued operations. See Note 3 - “Discontinued Operations” for further discussion regarding the results of discontinued operations.
Common Stock Warrants.
Our issued and outstanding 2012 warrants to purchase common stock do not qualify to be treated as equity and accordingly, are recorded as a liability (“Common Stock Warrant Liability”). The Common Stock Warrant Liability was initially recorded at fair value using a Monte Carlo simulation model. We are required to present these instruments at fair value at each reporting date and any changes in fair values are recorded as an adjustment to earnings. The Common Stock Warrant Liability is considered a Level 3 financial instrument. See Note 13 - “Fair Value”.
Stock Based Compensation.
All stock-based awards to date have exercise prices equal to the market price of our common stock on the date of grant and have ten-year contractual terms. Unvested options as of December 31, 2015 had vesting periods of one or three years from the date of grant. None of the stock options outstanding at December 31, 2015 are subject to performance or market-based vesting conditions.
We measure and recognize compensation expense for all stock-based awards made to employees and directors, including stock options. Compensation expense, net of estimated forfeitures, is based on the calculated fair value of the awards as measured at the grant date and is expensed over the service period of the awards.

Income Taxes.
Deferred tax assets and liabilities are determined based on the differences between the financial reporting and tax basis of assets and liabilities at each balance sheet date using tax rates expected to be in effect in the year the

differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance to the extent that it is more likely than not that they will not be realized. Our policy is to record interest and penalties directly related to income taxes as income tax expense in the Consolidated Statements of Operations.

Net Sales Recognition.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

Revenue is realized and earned when all of the following criteria are met:

- Persuasive evidence of an arrangement exists;
- Delivery has occurred or services have been rendered;
- The seller's price to the buyer is fixed or determinable; and
- Collectability is reasonably assured.

In our Biomarker Identification laboratory, we perform services on a project by project basis. When we receive payment in advance, we recognize revenue when we deliver the service. These projects typically do not extend beyond one year. At December 31, 2015 and 2014, deferred net sales associated with pharmacogenomics research projects, included in the balance sheet in deferred revenue, was $0.1 million and $0.3 million, respectively.

Net sales from Patient Testing laboratories are recognized on an individual test basis and take place when the test report is completed, reviewed and sent to the client less the reserve for insurance, Medicare and Medicaid contractual adjustments. There are no deferred net sales associated with our Patient Testing services. Adjustments to the allowances, based on actual receipts from third party payers, are reflected in the estimated contractual allowance applied prospectively. In the fourth quarter of 2015, we adjusted our contractual allowance rates to better reflect the reimbursement level we expect to achieve on Patient Testing billings. The adjustment negatively impacted our fourth quarter of 2015 Patient Testing revenues. Our Patient Testing revenues are reported as part of discontinued operations (See Note 3 - "Discontinued Operations").

Net sales of Genetic Assays and Platforms products, reported as discontinued operations (See Note 3 - "Discontinued Operations") are recognized in accordance with the terms of the sales arrangement. Such recognition is based on receipt of an unconditional customer order and transfer of title and risk of ownership to the customer, typically upon shipment of the product under a purchase order. Our sales terms do not provide for the right of return unless the product is damaged or defective. Net sales from certain services associated with the analytical instruments, to be performed subsequent to shipment of the products, is deferred and recognized when the services are provided. Such services, mainly limited to installation and training services that are not essential to the functionality of the instruments, typically are performed in a timely manner subsequent to shipment of the instrument. We also enter into various service contracts that cover installed instruments. These contracts cover specific time periods and net sales associated with these contracts are deferred and recognized ratably over the service period.

Taxes collected from customers and remitted to government agencies for specific net sales producing transactions are recorded net with no effect on the income statement.

Research and Development.

Research and development and various collaboration costs are charged to expense when incurred.

Translation of Foreign Currency.

Our foreign subsidiary, which is included within discontinued operations uses the local currency of the country in which it is located as its functional currency. Its assets and liabilities are translated into U.S. dollars at the exchange rates in effect at the balance sheet date. A translation loss of $0.3 million and $0.1 million is reported in other comprehensive income on the accompanying consolidated statements of comprehensive loss as December 31, 2015 and 2014, respectively.

Loss Per Share.

Basic loss per share is calculated based on the weighted-average number of shares of common stock outstanding during each period. Diluted loss per share includes shares issuable upon exercise of outstanding stock options, warrants or conversion rights that have exercise or conversion prices below the market value of our common stock, as long as the effect is not anti-dilutive. Options, warrants and conversion rights pertaining to 9,963,886 and 6,613,572 shares of our common stock have been excluded from the computation of diluted earnings per share at December 31, 2015 and 2014, respectively. The options, warrants and conversion rights that were exercisable in 2015 and 2014 were

not included because the effect would be anti-dilutive due to the net loss.

Recently Issued Accounting Pronouncements.

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers. This guidance requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to a customer. ASU No. 2014-09 will replace most existing revenue

recognition guidance in generally accepted accounting principles in the U.S. when it becomes effective. In July 2015, the FASB decided to defer the effective date of this new accounting guidance by one year. As a result, ASU No. 2014-09 will be effective for us for all annual and interim reporting periods beginning after December 15, 2017 and early adoption would be permitted as of the original effective date. The new standard permits the use of either the retrospective or cumulative effect transition method. We do not expect to early adopt this guidance and we have not selected a transition method. We are currently evaluating the impact this guidance will have on our financial condition, results of operations and cash flows.

In August 2014, the FASB issued ASU No. 2014-15, Presentation of Financial Statements - Going Concern (Subtopic 205-40). The new guidance addresses management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. The standard will be effective for the first interim period within annual reporting periods beginning after December 15, 2016. Early adoption is permitted. We do not expect to early adopt this guidance and do not believe that the adoption of this guidance will have a material impact on our consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-03, Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, which requires that debt issuance costs be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability, rather than as a deferred charge asset. ASU No. 2015-03 is effective for us beginning on January 1, 2016. ASU No. 2015-03 is not expected to have a material impact on our financial condition, results of operations or cash flows.

In February 2016, the FASB issued an ASU, "Leases". The new standard amends the recognition of lease assets and lease liabilities by lessees for those leases currently classified as operating leases and amends disclosure requirements associated with leasing arrangements. The new standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018. Early adoption is permitted. The new standard must be adopted using a modified retrospective transition, and provides for certain practical expedients. Transition will require application of the new guidance at the beginning of the earliest comparative period presented. We are currently assessing the impact of the adoption of this ASU will have on our consolidated financial statements.

3. DISCONTINUED OPERATIONS

On September 8, 2015, we entered into an Asset Purchase Agreement (the "Asset Purchase Agreement") with Edge BioSystems, Inc. ("Buyer"), pursuant to which we agreed to sell to Buyer, and Buyer agreed to purchase from us, our manufacturing, marketing and selling of high quality polymer and silica based beads and resin and chromatography columns business (collectively, the "Columns Business"). The Columns Business was part of our former segment, Genetic Assays and Platforms. Pursuant to the Asset Purchase Agreement, Buyer acquired substantially all of the assets used solely in connection with the Columns Business and assumed certain liabilities of the Columns Business for a total cash purchase price of approximately $2.1 million (the "Asset Sale"), which was paid on September 8, 2015 upon the closing of the Asset Sale. During the year ended December 31, 2015, we recorded a gain on the sale of the Columns Business of $1.5 million.

On November 25, 2015, we entered into an Asset Purchase Agreement (the "Purchase Agreement") with ADSTEC Corporation ("ADSTEC") and ADS Biotec Inc., a wholly-owned subsidiary of ADSTEC ("Buyer"), pursuant to which we sold (1) to ADSTEC our facilities located in Glasgow, Scotland and on Irvington Road in Omaha, Nebraska (together, the "Facilities") and all of our stock, inventory and raw materials located at the Facilities (collectively, the "Inventory"), and (2) to Buyer (a) all of the remaining assets relating to our Genetic Assays and Platforms business segment (the "Business"), other than the Inventory (the "Purchased Assets"), and (b) all of the ordinary shares of Transgenomic Limited, a wholly-owned subsidiary of ours (the "Shares"). The Purchase Agreement superseded the binding term sheet

between us and ADSTEC, effective as of September 30, 2015, as disclosed in our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 30, 2015 (the “Term Sheet”).

Pursuant to the Purchase Agreement, ADSTEC and Buyer acquired the Facilities, the Inventory, the Purchased Assets and the Shares for an aggregate purchase price of approximately $300,000, and Buyer assumed our financial and human resources commitments related to the Business (the “Transaction”). During the year ended December 31, 2015, we recorded a loss on the Transaction of $1.7 million.

Together, the Asset Sale and the Transaction represent the divestiture of our Genetic Assays and Platforms business resulting in a strategic shift that will have a major effect on our operations and financial results. Therefore, the divested operations of our Genetic Assays and Platforms business meet the criteria to be reported as discontinued operations.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

During the fourth quarter of 2015, our Board of Directors took actions to begin the process of divesting our Patient Testing business in New Haven, Connecticut. In March of 2016, we announced that we had suspended testing services in our Patient Testing laboratory as we review and evaluate various strategic alternatives for that business. As a result of these actions, as of December 31, 2015, our Patient Testing business meets the criteria to be reported as discontinued operations.

The related assets, liabilities, results of operations and cash flows for both the Genetic Assays and Platforms business and Patient Testing business are classified as assets held for sale, liabilities held for sale and discontinued operations for all periods presented.

Results of the discontinued operations consisted of the following:

	Years ended December 31,	
(in thousands)	2015	2014
Net sales	$18,584	$25,843
Cost of goods sold	12,287	15,187
Gross profit	6,297	10,656
Selling, general and administrative expense	15,187	16,761
Research and development expense	408	648
Impairment of long-lived assets	13,942	—
Operating loss from discontinued operations	(23,240)	(6,753)
(Loss) gain on sale of business	(224)	4,114
Loss from discontinued operations before income taxes	(23,464)	(2,639)
Income tax (benefit) expense	(648)	524
Loss from discontinued operations	$(22,816)	$(3,163)

The $0.2 million of loss on sale of business for the year ended December 31, 2015 includes a $1.5 million gain on the Asset Sales in the third quarter of 2015 and a $1.7 million loss on the Transaction in the fourth quarter of 2015. The $4.1 million of gain on sale of business for the year ended December 31, 2014 is a result of the sale of our Surveyor technology, which was reported within the prior period Genetic Assays and Platforms segment results, in July 2014.

We anticipate that we will complete the divestiture of the Patient Testing business during the first half of 2016.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

Assets and liabilities of the discontinued operations are classified as assets held for sale and liabilities held for sale in the consolidated balance sheets and consisted of the following:

	Dollars in Thousands	
	December 31, 2015	December 31, 2014
ASSETS		
Accounts receivable, net	$1,905	$7,161
Inventory, net	—	3,005
Other current assets	82	806
Total current assets	1,987	10,972
Property and equipment, net	—	997
Goodwill and intangible assets	—	14,131
Other assets	—	6
Total Assets	$1,987	$26,106
LIABILITIES		
Accounts payable	$—	$973
Accrued compensation	264	752
Accrued expenses	—	505
Deferred revenue	—	737
Total current liabilities	264	2,967
Other liabilities	—	871
Total Liabilities	$264	$3,838

The following is a summary of activity for the allowance for doubtful accounts from discontinued operations during the years ended December 31, 2015 and 2014. The allowance for doubtful accounts from discontinued operations are included in the assets held for sale in the consolidated balance sheets.

	Dollars in Thousands			
	Beginning Balance	Provision	Write Offs	Ending Balance
Twelve months ended December 31, 2015	$7,927	$9,447	$(2,710)	$14,664
Twelve months ended December 31, 2014	$3,821	$6,116	$(2,010)	$7,927

4. INVENTORIES

Inventories (net of allowance for slow moving and obsolescence) consisted of the following:

	Dollars in Thousands	
	December 31, 2015	December 31, 2014
Finished goods	$—	$—
Raw materials and work in process	113	—
Demonstration inventory	—	—
	$113	$—
Less allowances	(63)	—
Total	$50	$—

47

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

5. INTANGIBLE ASSETS AND OTHER ASSETS

We review our amortizable long-lived assets for impairment annually or whenever events indicate that the carrying amount of the asset (group) may not be recoverable. An impairment loss may be needed if the sum of the future undiscounted cash flows is less than the carrying amount of the asset (group). The amount of the loss would be determined by comparing the fair market value of the asset to the carrying amount of the asset (group).

We performed an impairment test as of September 30, 2015 due to the significant decline in the market price of our stock. As a result of this testing, we recorded impairment charges related to our long-lived assets of approximately $7.0 million during the three months ended September 30, 2015. The impairment charges include $0.8 million related to property and equipment and $6.2 million related to amortizable intangibles (see table below).

Long-lived intangible assets and other assets consisted of the following:

	Dollars in Thousands December 31, 2015			
	Cost	Accumulated Amortization	Impairment Charge	Net Book Value
Acquired technology	$9,009	$4,611	$4,398	$—
Assay royalties	1,434	973	461	—
Third party payor relationships	367	116	251	—
Tradenames and trademarks	824	439	385	—
Customer relationships	652	130	522	—
Covenants not to compete	184	184	—	—
Patents	980	126	148	706
Intellectual property	671	207	—	464
	$14,121	$6,786	$6,165	$1,170

	Dollars in Thousands December 31, 2014				
	Cost	Accumulated Amortization	Net Book Value	Included in assets held for sale	Included in continuing operations
Acquired technology	$9,009	$3,995	$5,014	$5,014	$—
Assay royalties	1,434	819	615	615	—
Third party payor relationships	367	98	269	269	—
Tradenames and trademarks	824	351	473	473	—
Customer relationships	652	98	554	554	—
Covenants not to compete	184	138	46	46	—
Patents	815	87	728	157	571
Intellectual property	266	86	180	—	180
	$13,551	$5,672	$7,879	$7,128	$751

48

Table of Contents
TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
Years Ended December 31, 2015 and 2014

	Estimated Useful Life
Acquired technology	7 – 10 years
Assay royalties	7 years
Third party payor relationships	15 years
Tradenames and trademarks	7 years
Customer relationships	15 years
Covenants not to compete	3 years
Patents	Life of the patent
Intellectual property	7 years

Amortization expense for intangible assets was $0.1 million and $0.1 million during the years ended December 31, 2015 and 2014. Amortization expense for intangible assets for each of the five succeeding fiscal years is expected to be $0.2 million, $0.1 million, $0.1 million, $0.1 million and $0.1 million for the years ended December 31, 2016, 2017, 2018 2019 and 2020, respectively.

Other assets include U.S. security deposits and deferred tax assets, net of applicable valuation allowances.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

6. DEBT

	Dollars in Thousands Year Ended December 31,	
	2015	2014
Revolving Line [1]	$3,025	$3,000
Term Loan [2]	4,000	4,087
Convertible Promissory Note [3]	571	750
Total debt	7,596	7,837
Current portion of long term debt	(7,596)	(462)
Long term debt, net of current maturities	$—	$7,375

(1) Revolving Line of Credit. Amounts advanced under the Revolving Line initially bore interest at an annual rate equal to the greater of (a) 4.25% or (b) the Wall Street Journal prime rate plus 1%. Interest is payable on a monthly basis, with the balance payable at the maturity of the Revolving Line. Under the Amendment to the Loan Agreement, which we entered into on August 2, 2013, amounts advanced under the Revolving Line bear interest at an annual rate equal to the greater of (x) 6.25% or (y) the Wall Street Journal prime rate plus 3%. The current interest rate is 6.50%. Under the Loan Agreement, we paid the Lenders an upfront fee of $20,000, and will pay the Lenders an additional commitment fee of $20,000 on each one year anniversary of March 13, 2013, the Effective Date, during the term of the Revolving Line. In addition, a fee of 0.5% per annum is payable quarterly on the unused portion of the Revolving Line. The Revolving Line matures on November 1, 2017.

(2) Term Loan. We received $4.0 million under the Term Loan on the Effective Date. Pursuant to the terms of the Loan Agreement, as amended by the Sixth Amendment (as defined in "-Revolving Line and Term Loan" below), we made a principal payment of approximately $148,000 on April 1, 2015 and were not be obligated to make monthly payments of principal to the Lenders until April 1, 2016. Pursuant to the Eighth Amendment of the Loan Agreement, the maturity date of the Loan Agreement was extended until November 1, 2017 and no principal payments on the Term Loan are due until such date. The current interest rate is 9.1%.

We paid the Lenders an upfront fee of $40,000 for the Term Loan, and will pay the Lenders an additional final payment of $120,000 at maturity or prepayment of the Term Loan. In addition, if we repay the Term Loan prior to maturity, we will pay the Lenders a prepayment penalty of 1% of the total outstanding balance under the Term Loan.

Additional Terms

The Loan Agreement contains affirmative and negative covenants. Under the Loan Agreement, we are required to maintain a minimum liquidity ratio and achieve a minimum amount of revenue, and we also agreed not to (i) pledge or otherwise encumber our assets other than to the Lenders, (ii) enter into additional borrowings or guarantees, (iii) repurchase our capital stock, or (iv) enter into certain mergers or acquisitions without the Lenders' consent. Additionally, the Loan Agreement contains a subjective acceleration clause at the discretion of the Lenders. As of December 31, 2015, the Company was not in compliance with all financial covenants of the Loan Agreement, as amended by the Eighth Amendment. As such, all debt has been classified as current at December 31, 2015.

To secure the repayment of any amounts borrowed under the Revolving Line and the Term Loan, we granted the Lenders a security interest in all of our assets. The occurrence of an event of default under the Loan Agreement could result in the acceleration of our obligations under the Loan Agreement and would increase the applicable interest rate under the Revolving Line or Term Loan (or both) by 5%, and permit the Lenders to exercise remedies with respect to

the collateral under the Loan Agreement.

(3) Convertible Promissory Notes. The Notes accrues interest at a rate of 6% per year and mature on December 31, 2016.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

Revolving Line and Term Loan.

On March 13, 2013 (the "Effective Date"), we entered into a Loan and Security Agreement with affiliates of Third Security, LLC, a related party, (the "Lenders") for (a) a revolving line of credit (the "Revolving Line") with borrowing availability of up to $4.0 million, subject to reduction based on our eligible accounts receivable, and (b) a term loan (the "Term Loan" and together with the Revolving Line, the "Loan Agreement") of $4.0 million. Proceeds were used to pay off a three year senior secured promissory note payable to PGxHealth, LLC, which was entered into on December 29, 2010 in conjunction with our acquisition of the FAMILION family of genetic tests, and for general corporate and working capital purposes.

On August 2, 2013, we entered into an amendment to the Loan Agreement (the "Amendment"). The Amendment, which became effective as of June 30, 2013, reduced our future minimum revenue covenants under the Loan Agreement and modified the interest rates applicable to the amounts advanced under the Revolving Line.

On November 14, 2013, we entered into a second amendment to the Loan Agreement (the "Second Amendment"). The Second Amendment, which became effective as of October 31, 2013, reduced our future minimum revenue covenant under the Loan Agreement.

On January 27, 2014, we entered into a third amendment to the Loan Agreement (the "Third Amendment"). Pursuant to the Third Amendment, the Lenders agreed to waive certain events of default under the Loan Agreement, and the parties amended certain provisions of the Loan Agreement, including the minimum liquidity ratio that we must maintain during the term of the Loan Agreement.

On March 3, 2014, we entered into a fourth amendment to the Loan Agreement (the "Fourth Amendment"). Pursuant to the terms of the Fourth Amendment, we were not required to make any principal or interest payments under the Term Loan for the period from March 1, 2014 through March 31, 2015. The interest on the debt that was deferred and not paid was capitalized as part of the Term Loan. The amount of interest that was capitalized from March 1, 2014 to March 31, 2015 was $0.4 million.

On October 22, 2014, we entered into a fifth amendment to the Loan Agreement (the "Fifth Amendment"). Pursuant to the Fifth Amendment, the parties amended certain provisions of the Loan Agreement, including reducing the minimum liquidity and revenue covenants under the Loan Agreement. The Fifth Amendment also reduced the aggregate amount that we may borrow under the Revolving Line from $4.0 million to $3.0 million.

On April 1, 2015, we entered into a sixth amendment to the Loan Agreement (the "Sixth Amendment"). Pursuant to the Sixth Amendment, among other things, (a) the Lenders waived specified events of default under the terms of the Loan Agreement, (b) commencing April 1, 2015, we began making monthly interest payments with respect to the Term Loan to the Lenders, (c) we will not be obligated to make monthly payments of principal under the Term Loan to the Lenders until April 1, 2016, (d) we made an initial prepayment of a portion of the Term Loan balance in the amount of approximately $148,000 on April 1, 2015 and will make one or more additional prepayments to the Lenders under the Loan Agreement upon the occurrence of certain events, as defined in the Loan Agreement, and (e) we are not required to comply with the minimum liquidity ratio under the terms of the Loan Agreement until the earliest to occur of a specified event, as defined in the Loan Agreement, or March 31, 2016. The Sixth Amendment also extends the time period in which we must provide certain reports and statements to the Lenders and amends the circumstances pursuant to which we may engage in certain sales or transfers of our business or property without the consent of the Lenders.

As of June 30, 2015, we were in compliance with all financial covenants of the Loan Agreement, but were not in compliance with the restrictions limiting the amount that we may borrow under the Revolving Line. Accordingly, on August 10, 2015, we received a waiver from the Lenders relating to this non-compliance and paid the Lenders an aggregate of $0.7 million, which brought us back into compliance with the terms of the Revolving Line.

On September 4, 2015, we entered into a seventh amendment to the Loan Agreement (the “Seventh Amendment”). The Seventh Amendment, among other things, (a) provided that the Lenders waived specified events of default under the terms of the Loan Agreement, (b) reduced our future minimum revenue covenants under the Loan Agreement, (c) reduced our borrowing availability under the Revolving Line to approximately $2.3 million and (d) limited our borrowing base under the Loan Agreement to the amount of the Revolving Line.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

On January 6, 2016, we entered into an eighth amendment to the Loan Amendment (the "Eighth Amendment"). The Eighth Amendment, among other things, (1) provides that the Lenders will waive specified events of default under the terms of the Loan Agreement, (2) reduces our future minimum revenue covenants under the Loan Agreement, (3) extends the maturity date of the Loan Agreement until November 1, 2017, and (4) provides for the repayment of an overadvance of $750,000 previously provided by the Lenders to us pursuant to the Loan Agreement.

During the first quarter of 2016, the overadvance that existed at December 31, 2015 was repaid to the Lenders and $0.2 million was received from certain of the Lenders and another lender affiliate in connection with the equity offering made on January 6, 2015.

Convertible Promissory Notes.

On December 31, 2014, we entered into an Unsecured Convertible Promissory Note Purchase Agreement (the "Note Purchase Agreement") with an accredited investor (the "Investor") pursuant to which we agreed to issue and sell to the Investor in a private placement an unsecured convertible promissory note (the "Initial Note"). We issued the Initial Note in the aggregate principal amount of $750,000 to the Investor on December 31, 2014. Pursuant to the terms of the Initial Note, interest accrued at a rate of 6% per year and the Initial note was set to mature on December 31, 2016. Under the Note, the outstanding principal and unpaid interest accrued was convertible into shares of our common stock as follows: (i) commencing upon the date of issuance of the Initial Note (but no earlier than January 1, 2015), the Investor was entitled to convert, on a one-time basis, up to 50% of the outstanding principal and unpaid interest accrued under the Initial Note, into shares of our common stock at a conversion price equal to the lesser of (a) the average closing price of the common stock on the principal securities exchange or securities market on which our common stock is then traded (the "Market") for the 20 consecutive trading days immediately preceding the date of conversion, and (b) $2.20 (subject to adjustment for stock splits, stock dividends, other distributions, recapitalizations and the like); and (ii) commencing February 15, 2015, the Investor was entitled to convert, on a one-time basis, any or all of the remaining outstanding principal and unpaid interest accrued under the Initial Note, into shares of our common stock at a conversion price equal to 85% of the average closing price of our common stock on the Market for the 15 consecutive trading days immediately preceding the date of conversion. The Initial Note has been converted in full into 502,786 shares of our common stock, in accordance with the terms of the Initial Note.

On January 15, 2015, we entered into the Note Purchase Agreement with seven accredited investors (the "Additional Investors") and, on January 20, 2015, issued and sold to the Additional Investors, in a private placement, notes (the "Additional Notes") in an aggregate principal amount of $925,000. The Additional Notes have the same terms and conditions as the Initial Note. As of December 31, 2015, $400,000 of the aggregate principal amount of the Additional Notes, and accrued interest thereon, has been converted into an aggregate of 281,023 shares of our common stock.

The aggregate minimum principal maturities of the debt for the following fiscal years are as follows (dollars in thousands):

2016	$7,596
Total	$7,596

7. CAPITAL LEASES

The following is an analysis of the property acquired under capital leases.

	Dollars in Thousands Asset Balances at	
Classes of Property	December 31, 2015	December 31, 2014
Equipment	$828	$1,514
Less: Accumulated amortization	(725)	(997)
Total	$103	$517

The following is a schedule by years of future minimum lease payments under capital leases together with the present value of the net minimum lease payments as of December 31, 2015.

Year ending December 31:

	Dollars in Thousands
2016	$ 3
2017	1
Total minimum lease payments	$ 4
Less: Amount representing interest	—
Present value of net minimum lease payments	$ 4

The short term portion of our capital leases is included in accrued expenses and the long term portion is included in other long-term liabilities on the Balance Sheet. Included in depreciation for the years ended December 31, 2015 and 2014 was $0.2 million and $0.3 million, respectively, related to equipment acquired under capital leases.

8. COMMITMENTS AND CONTINGENCIES

We are subject to a number of claims of various amounts, which arise out of the normal course of business. In the opinion of management, the disposition of pending claims will not have a material adverse effect on our financial position, results of operations or cash flows.

Rent expense under all operating leases was $0.2 million in each of 2015 and 2014. We lease certain equipment, vehicles and operating facilities under non-cancellable operating leases , some of which have escalation clauses that expire on various dates through 2022. Future minimum lease payments under non-cancellable operating leases, including non-cancellable lease associated with discontinued operations, are as follows (in thousands):

2016	$727
2017	724
2018	711
2019	676
2020	680
thereafter	388
Total	$3,906

At December 31, 2015, firm commitments to vendors totaled $0.3 million.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

9. INCOME TAXES

The Company's provision for income taxes from continuing operations for the years ended December 31, 2015 and 2014 relates to income taxes in states, foreign countries and other local jurisdictions and differs from the amounts determined by applying the statutory Federal income tax rate to loss before income taxes for the following reasons:

	Dollars in Thousands	
	2015	2014
Benefit at federal rate	$(3,449)	$(3,665)
Increase (decrease) resulting from:		
State income taxes—net of federal benefit	(320)	(401)
Miscellaneous permanent differences	163	223
Liability warrants	70	(154)
State, net operating loss expiration/true-up	(187)	(327)
Other—net	(119)	2
Valuation allowance	3,842	4,322
Total income tax expense (benefit)	$—	$—

	Dollars in Thousands	
	2015	2014
Federal:		
Current	$—	$—
Deferred	—	—
Total Federal	$—	$—
State:		
Current	$—	$—
Deferred	—	—
Total State	$—	$—
Foreign:		
Current	$—	$—
Deferred	—	—
Total Foreign	$—	$—
Total Tax Provision	$—	$—

The Company's deferred income tax asset from continuing operations at December 31, 2015 and 2014 is comprised of the following temporary differences:

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

	Dollars in Thousands	
	2015	2014
Deferred Tax Asset:		
Net operating loss carryforward	$51,449	$46,051
Research and development credit carryforwards	918	918
Other	585	539
	52,952	47,508
Less valuation allowance	(52,902)	(47,406)
Deferred Tax Asset	$50	$102
Deferred Tax Liability:		
Property and equipment	50	102
Deferred Tax Liability	$50	$102
Net Deferred Asset (Liability)	$—	$—

At December 31, 2015, we had total unused federal tax net operating loss carryforwards of $142.9 million. The expiration dates are as follows (amounts in thousands):

2018	$1,838
2019	8,181
2020	9,662
2021	8,228
2022	16,862
2023	16,173
2024	17,390
2025	8,153
2026	6,792
2027	3,238
2028	1,272
2029	591
2031	2,784
2032	8,358
2033	12,097
2034	7,591
2035	13,645
Total	$142,855

Of these federal net operating loss carryforwards, $1.2 million were obtained in the acquisition of Annovis, Inc. and may be subject to certain restrictions. Remaining net operating loss carryforwards could be subject to limitations under section 382 of the Internal Revenue Code of 1986, as amended. At December 31, 2015, we had unused state tax net operating loss carryforwards of approximately $58.8 million that expire at various times beginning in 2016. At December 31, 2015, we had unused research and development credit carryforwards of $0.9 million that expire at various times between 2018 and 2028. At December 31, 2015, we had unused foreign net operating loss carryforwards relating to operations in the United Kingdom of approximately $0.9 million with an unlimited carryforward period. A valuation allowance has been provided for the net deferred tax assets, due to the cumulative losses in recent years and an inability to utilize any additional losses as carrybacks. We will continue to assess the recoverability of deferred tax assets and the related valuation allowance. To the extent we begin to generate income in future years and it is

determined that such valuation allowance is no longer required, the tax benefit of the remaining deferred tax assets will be recognized at such time.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

Our liability for uncertain tax positions, which was included in other long term liabilities, was $0.1 million and $0.1 million as of December 31, 2015 and 2014, respectively. We recorded less than $0.1 million of additional uncertain tax positions during the years ended 2015 and 2014. We recorded a reduction of $0.2 million for uncertain tax positions during the year ended 2014. We recorded zero and $0.2 million for reductions in uncertain tax positions relating to statute of limitations lapse for the years ended 2015 and 2014, respectively. We had no material interest or penalties during fiscal 2015 or fiscal 2014, and we do not anticipate any such items during the next twelve months. Our policy is to record interest and penalties directly related to income taxes as income tax expense in the Consolidated Statements of Operations. We file income tax returns in the U.S. federal jurisdiction, various U.S. state jurisdictions and various foreign jurisdictions. We have statutes of limitation open for Federal income tax returns related to tax years 2011 through 2015. We have state income tax returns subject to examination primarily for tax years 2011 through 2015. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service, state or foreign tax authorities to the extent utilized in a future period. Open tax years related to foreign jurisdictions remain subject to examination. Our primary foreign jurisdiction is the United Kingdom, which has open tax years for 2011 through 2015.

During November 2015, the FASB issued ASU 2015-17, “Balance Sheet Classification of Deferred Taxes”, which simplifies the presentation of deferred income taxes. This ASU requires that deferred tax assets and liabilities be classified as non-current in a statement of financial position. We early adopted ASU 2015-17 effective December 31, 2015 on a retrospective basis. Adoption of this ASU resulted in a reclassification of our net current deferred tax asset to the net non-current deferred tax asset in our Consolidated Balance Sheet as of December 31, 2014 and 2015

10. EMPLOYEE BENEFIT PLAN

We maintain an employee 401(k) retirement savings plan that allows for voluntary contributions into designated investment funds by eligible employees. We currently match the employee’s contributions at the rate of 100% on the first 3% of contributions and 50% on the next 2% of contributions. We may, at the discretion of our Board of Directors, make additional contributions on behalf of the Plan’s participants. Contributions to the 401(k) plan were $0.4 million and $0.4 million for the years ended December 31, 2015 and 2014, respectively.

11. STOCKHOLDERS’ EQUITY

Common Stock.

Pursuant to our Third Amended and Restated Certificate of Incorporation, as amended, we currently have 150,000,000 shares of common stock authorized for issuance.

On February 2, 2012, we entered into definitive agreements with institutional and other accredited investors and raised approximately $22.0 million in a private placement financing (the “Private Placement”), which includes an aggregate of $3.0 million in convertible notes (the “Convertible Notes”) issued in December 2011 to entities affiliated with Third Security, LLC (the “Third Security Investors”), a related party, that automatically convert into shares of our common stock and warrants to purchase such common stock on the same terms as all investors in the Private Placement. Pursuant to the applicable purchase agreement, we issued an aggregate of 1,583,333 shares of our common stock at a price per share of $12.00, as well as five-year warrants to purchase up to an aggregate of 823,333 shares of common stock with an exercise price of $15.00 per share. In connection with the conversion of the Convertible Notes, the Third Security Investors received an aggregate of 250,000 shares of common stock and 125,000 warrants on the same terms as all investors in the Private Placement. Craig-Hallum Capital Group LLC served as the sole placement agent for the offering. In consideration for services rendered as the placement agent in the offering, we agreed to (i) pay to the placement agent cash commissions equal to $1,330,000, or 7.0% of the gross proceeds received in the offering, (ii)

issue to the placement agent a five-year warrant to purchase up to 31,666 shares of our common stock (representing 2% of the shares sold in the Private Placement) with an exercise price of $15.00 per share and other terms that are the same as the terms of the warrants issued in the Private Placement; and (iii) reimburse the placement agent for reasonable out-of-pocket expenses, including fees paid to the placement agent's legal counsel, incurred in connection with the offering, which reimbursable expenses were not to exceed $125,000. The costs incurred to complete the Private Placement were recorded as a reduction in equity in the amount of $1.5 million. Net proceeds from this offering have been used for general corporate and working capital purposes, primarily to accelerate development of several of our key initiatives.

On January 24, 2013, we entered into a Securities Purchase Agreement with certain institutional and other accredited investors pursuant to which we: (i) sold to the investors an aggregate of 1,383,333 shares of our common stock at a price per share

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

of $6.00 for aggregate gross proceeds of approximately $8.3 million; and (ii) issued to the investors warrants to purchase up to an aggregate of 691,656 shares of our common stock with an exercise price of $9.00 per share (the "Offering"). The warrants may be exercised, in whole or in part, at any time from January 30, 2013 until January 30, 2018 and contain both cash and "cashless exercise" features. The Third Security Investors purchased an aggregate of 500,000 shares of common stock and warrants to purchase an aggregate of 250,000 shares of common stock in the Offering on the same terms as the other investors. We used the net proceeds from the Offering for general corporate and working capital purposes.

In connection with the Offering, we entered into a registration rights agreement with the investors (the "Registration Rights Agreement"). The Registration Rights Agreement required that we file with the Securities and Exchange Commission (the "SEC") a registration statement to register for resale the shares of common stock sold and the shares of common stock issuable upon exercise of the warrants by March 16, 2013. The registration statement was filed with the SEC on March 15, 2013 and was declared effective by the SEC on March 29, 2013.

The January 2013 common stock transaction required the repricing and issuance of additional common stock warrants to the holders of warrants issued in the February 2012 common stock and warrant sale. The exercise price of the warrants decreased from $15.00 per share to $12.96 per share and the number of shares issuable upon exercise of the warrants increased from 948,333 to 1,097,600.

On October 22, 2014, we entered into a Securities Purchase Agreement with certain accredited investors (the "October 2014 Investors"), pursuant to which we, in a private placement, issued and sold to the October 2014 Investors (the "2014 Private Placement") an aggregate of 730,776 shares of our common stock at a price per share of $3.25 for an aggregate purchase price of approximately $2.375 million, and warrants to purchase up to an aggregate of 365,388 shares of our common stock with an initial exercise price of $4.00 per share that are exercisable for the period from April 22, 2015 through April 22, 2020. In connection with the 2014 Private Placement, we also issued a warrant to purchase up to an aggregate of 9,230 shares of our common stock to one advisor. The warrants issued in the 2014 Private Placement include both cash and "cashless exercise" features.

The 2014 Private Placement required the repricing and issuance of additional common stock warrants to the holders of warrants issued in the February 2012 common stock and warrant sale. The exercise price of the warrants decreased from $11.73 per share to $10.86 per share and the number of shares issuable upon exercise of the warrants increased from 1,212,665 to 1,309,785.

On December 31, 2014, we entered into the Note Purchase Agreement with the Investor pursuant to which we agreed to issue and sell the Initial note to the Investor (the "Note Private Placement"). See Note 6 "Debt-Convertible Promissory Notes" for additional information regarding the terms of the Initial note.

Pursuant to the terms of the Note Purchase Agreement, we are subject to certain registration obligations and we may be required to effect one or more other registrations to register for resale the shares of our common stock issued or issuable under the Initial Note in connection with certain "piggy-back" registration rights granted to the Investor.

The Note Private Placement required the repricing and issuance of additional common stock warrants to the holders of warrants issued in the February 2012 common stock and warrant sale. The exercise price of the 2012 warrants decreased from $10.86 per share to $10.25 per share and the number of shares issuable upon exercise of the warrants increased from 1,309,785 to 1,387,685.

On January 15, 2015, we entered into the Note Purchase Agreement with the Additional Investors and, on January 20, 2015, issued and sold to the Additional Investors, in a private placement, the Additional Notes in an aggregate principal amount of $925,000 (the "Additional Note Private Placement"). The Additional Notes have the same terms and conditions as the Initial Note.

Craig-Hallum acted as the sole placement agent for the sale and issuance of the Additional Notes. In connection with the sale and issuance of the Additional Notes, we issued to Craig-Hallum an unsecured convertible promissory note, upon the same terms and conditions as the Notes, in an aggregate principal amount equal to 5% of the proceeds received by us pursuant to the sale and issuance of the Additional Notes, or $46,250. As of the date of filing of this

Annual Report, the Placement Agent Note remains outstanding.

The Additional Note Private Placement required the repricing and issuance of additional common stock warrants to the investors in our February 2012 common stock and warrant financing. The exercise price of these warrants decreased from $10.25 per share to $9.59 per share and the number of shares issuable upon exercise of the warrants increased from 1,387,685 to 1,483,161.

On February 27, 2015, we entered into a purchase agreement with Craig-Hallum Capital Group LLC (the "Underwriter") relating to our sale and issuance of 3,573,899 shares of our common stock and corresponding warrants to purchase up to 714,780 shares of our common stock (the "2015 Offering"). Each share of common stock was sold in combination with a warrant to purchase

0.20 of a share of common stock. The purchase price to the public for each share of common stock and accompanying warrant was $1.95.

The purchase price paid by the Underwriter to us for the common stock and accompanying warrants was $1.8135. The net proceeds from the 2015 Offering, after deducting the Underwriter's discount and other estimated 2015 Offering expenses, were approximately $6.2 million.

The accompanying warrants are exercisable immediately upon their initial issuance date at an exercise price of $2.24 per share and will expire five years from the date of issuance. The exercise price will also be subject to adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock.

The 2015 Offering required the repricing and issuance of additional common stock warrants to the investors in our February 2012 common stock and warrant financing. The exercise price of these warrants decreased from $9.59 per share to $7.56 per share and the number of shares issuable upon exercise of the warrants increased from 1,483,161 to 1,881,396.

On June 30, 2015, we entered into a Securities Purchase Agreement with certain accredited investors (the "July 2015 Investors") pursuant to which, on July 7, 2015, we sold to the July 2015 Investors, and the July 2015 Investors purchased from us, (a) an aggregate of approximately 1.5 million shares of our common stock at a price per share of $1.42, (b) warrants (the "Series B Warrants") to purchase up to an aggregate of 0.7 million shares of our common stock with an exercise price of $0.01 per share, and (c) warrants (the "Series A Warrants" and, together with the Series B Warrants, the "July 2015 Warrants") to purchase up to an aggregate of 1.2 million shares of our common stock, with an exercise price of $1.66 per share (collectively, the "July 2015 Offering"). The purchase price for the Series B Warrants was $1.42 per share of our common stock subject to the Series B Warrants. Each of the July 2015 Warrants has a term of 5 and 1/2 years. The Series B Warrants are immediately exercisable. The Series A Warrants will be exercisable beginning on January 7, 2016, six months from the date of issuance. The aggregate gross proceeds to us from the July 2015 Offering were approximately $3.0 million.

Craig-Hallum Capital Group LLC (the "2015 Placement Agent") served as the sole placement agent for the Offering. In consideration for services rendered as the placement agent in the July 2015 Offering, we (a) paid to the 2015 Placement Agent cash commissions equal to approximately $212,783, or 7.0% of the gross proceeds received in the July 2015 Offering; (b) issued to the 2015 Placement Agent a five-year warrant to purchase up to 107,033 shares of our common stock with an exercise price of $1.66 per share and which is subject to other terms that are the same as the terms of the Series A Warrants; and (c) reimbursed the 2015 Placement Agent for reasonable out-of-pocket expenses, including fees paid to the 2015 Placement Agent's legal counsel, incurred in connection with the July 2015 Offering, which reimbursable expenses did not exceed $50,000.

The July 2015 Offering required the repricing and issuance of additional common stock warrants to the investors in our February 2012 common stock and warrant financing. The exercise price of these warrants decreased from $7.56 per share to $6.50 per share and the number of shares issuable upon exercise of the warrants increased from 1,881,396 to 2,188,177.

Common Stock Warrants.

During the twelve months ended December 31, 2015, we issued warrants to purchase 3,466,841 shares of common stock and none of the issued warrants were exercised. Included in the warrants issued in 2015 were 800,492 warrant issued due to repricing requirements of the Private Placement and 2,666,349 warrants issued in connection with the 2015 Offering and the July 2015 Offering. During the twelve months ended December 31, 2015, warrants to purchase 431,027 shares of common stock expired. There were 664,703 common stock warrants issued during the 12 months ended December 31, 2014 and none of the issued warrants were exercised. Included in the warrants issued in 2014 were 290,085 warrants issued due to re-pricing requirements of the Private Placement. Warrants to purchase an aggregate of 5,920,799 shares of common stock were outstanding at December 31, 2015.

58

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

Warrant Holder	Issue Year	Expiration	Underlying Shares	Exercise Price
Various Institutional Holders[1]	2012	February 2017	1,899,729	$6.50
Third Security Investors[1]	2012	February 2017	288,448	$6.50
Various Institutional Holders[2]	2013	January 2018	441,655	$9.00
Third Security Investors[2]	2013	January 2018	250,000	$9.00
Various Institutional Holders[3]	2014	April 2020	374,618	$4.00
Various Institutional Holders[4]	2015	February 2020	714,780	$2.24
Various Institutional Holders[5]	2015	December 2020	1,284,405	$1.66
Various Institutional Holders[5]	2015	December 2020	667,164	$0.01
			5,920,799	

(1) These Warrants were issued in connection with the Private Placement completed in February 2012 and are classified as a liability in our financial statements. See Footnote 13 - “Fair Value”. These warrants also contain certain anti-dilution provisions that provide for an adjustment to the exercise price and number of shares issuable upon exercise of the warrant in the event that we engage in certain issuances of shares of our common stock at a price lower than the exercise price of the warrant.
(2) These warrants were issued in connection with the Offering, which was completed in January 2013.
(3) These warrants were issued in connection with the 2014 Private Placement, which was completed in October 2014.
(4) These warrants were issued in connection with the 2015 Offering, which was completed in February 2015.
(5) These warrants were issued in connection with the July 2015 Offering, which was completed in July 2015.

Preferred Stock Series A.

The Company’s Board of Directors is authorized to issue up to 15,000,000 shares of preferred stock in one or more series, from time to time, with such designations, powers, preferences and rights and such qualifications, limitations and restrictions as may be provided in a resolution or resolutions adopted by the Board of Directors. The authority of the Board of Directors includes, but is not limited to, the determination or fixing of the following with respect to shares of such class or any series thereof: (i) the number of shares; (ii) the dividend rate, whether dividends shall be cumulative and, if so, from which date; (iii) whether shares are to be redeemable and, if so, the terms and amount of any sinking fund providing for the purchase or redemption of such shares; (iv) whether shares shall be convertible and, if so, the terms and provisions thereof; (v) what restrictions are to apply, if any, on the issue or reissue of any additional preferred stock; and (vi) whether shares have voting rights. The preferred stock may be issued with a preference over the common stock as to the payment of dividends. We have no current plans to issue any additional preferred stock. Classes of stock such as the preferred stock may be used, in certain circumstances, to create voting impediments on extraordinary corporate transactions or to frustrate persons seeking to effect a merger or otherwise to gain control of the Company. For the foregoing reasons, any additional preferred stock issued by the Company could have an adverse effect on the rights of the holders of the common stock.

On December 29, 2010, we entered into a transaction with the Third Security Investors, pursuant to the terms of a Series A Convertible Preferred Stock Purchase Agreement (the “Series A Purchase Agreement”), in which we: (i) sold an aggregate of 2,586,205 shares of Series A Preferred Stock at a price of $2.32 per share; and (ii) issued Series A Warrants to purchase up to an aggregate of 1,293,102 shares of Series A Preferred Stock having an exercise price of $2.32 per share (the sale of Series A Preferred Stock and issuance of the Series A Warrants hereafter referred to together as the “Financing”). The Series A Warrants may be exercised at any time from December 29, 2010 until December 28, 2015 and contain a “cashless exercise” feature. The gross proceeds from the Series A financing were $6.0 million. The $0.2 million of costs incurred to complete the Series A financing were recorded as a reduction in the value of the Series A Preferred Stock. We used the net proceeds from the financing to acquire the FAMILION family of genetic tests from PGxHealth, a subsidiary of Clinical Data, Inc. Until the November 2011 modifications, the Series

A Preferred Stock met the definition of mandatorily redeemable stock as it was preferred capital stock that was redeemable at the option of the holder through December 2015 and was reported outside of equity. The Series A Preferred Stock was to be accreted to its redemption value of $6.0 million. Until the November 2011 modifications, the Series A Warrants did not qualify to be treated as equity and, accordingly, were recorded as a liability. A preferred stock anti-dilution feature is embedded within the Series A Preferred Stock that met the definition of a derivative.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

In connection with the Series A financing, we filed a Certificate of Designation of Series A Convertible Preferred Stock (the "Series A Certificate of Designation") with the Secretary of State of the State of Delaware, designating 3,879,307 shares of our preferred stock as Series A Preferred Stock. As of December 31, 2013, the Series A Preferred Stock, including the Series A Preferred Stock issuable upon exercise of the Series A Warrants, was convertible into shares of our common stock at a rate of 4-for-1, which conversion rate is subject to further adjustment as set forth in the Series A Certificate of Designation. Giving effect to the reverse split of our stock in January 2014, the conversion rate was adjusted to 1-for-3. Certain rights of the holders of the Series A Preferred Stock are senior to the rights of the holders of our common stock. The Series A Preferred Stock has a liquidation preference equal to its original price per share, plus any accrued and unpaid dividends thereon. The holders of the Series A Preferred Stock are entitled to receive quarterly dividends, which accrue at the rate of 10% of the original price per share per annum, whether or not declared, and which shall compound annually and shall be cumulative. In any calendar quarter in which we have positive distributable cash flow as defined in the Series A Purchase Agreement, we are required to pay from funds legally available a cash dividend in the amount equal to the lesser of 50% of such distributable cash flow or the aggregate amount of dividends accrued on the Series A Preferred Stock.

Generally, the holders of the Series A Preferred Stock are entitled to vote together with the holders of common stock, as a single group, on an as-converted basis. However, the Series A Certificate of Designation provides that we shall not perform some activities, subject to certain exceptions, without the affirmative vote of a majority of the holders of the outstanding shares of Series A Preferred Stock. The holders of the Series A Preferred Stock, along with the holders of the Series B Preferred Stock, also are entitled to elect or appoint, as a single group, two directors of the Company.

In connection with the Series A financing, we also entered into a registration rights agreement with the Third Security Investors (the "Registration Rights Agreement"). Pursuant to the terms of the Registration Rights Agreement, the Company has granted certain demand, "piggyback" and S-3 registration rights covering the resale of the shares of common stock underlying the Series A Preferred Stock issued pursuant to the Series A Purchase Agreement and issuable upon exercise of the Series A Warrants and all shares of common stock issuable upon any dividend or other distribution with respect thereto.

In November 2011, we entered into a transaction with the Third Security Investors, pursuant to an Agreement Regarding Preferred Stock (the "Amendment Agreement"), in which the Third Security Investors agreed to (i) waive their rights to enforce the anti-dilution and redemption features of the Series A Preferred Stock and (ii) at the next annual stockholders' meeting, vote to amend the Series A Certificate of Designation to remove the anti-dilution and redemption features of the Series A Preferred Stock. In exchange, the Company issued shares of common stock to the Third Security Investors having an aggregate market value of $0.3 million.

As a result of the Amendment Agreement, the values of the Series A Preferred Stock and Series A Warrants, including the Series A Preferred Stock conversion feature and Series A Warrant liability, were reclassified into stockholders' equity as of the date of the Amendment Agreement.

The Series A Preferred Stock was converted into common stock on January 6, 2016 (See Note 15 - "Subsequent Events - Conversion of Preferred Stock").

Preferred Stock Series B.

On March 5, 2014, we entered into a Series B Convertible Preferred Stock Purchase Agreement (the "Series B Purchase Agreement") with affiliates of Third Security, LLC (the "2014 Third Security Investors"), pursuant to which we, in a private placement, sold and issued an aggregate of 1,443,297 shares of our Series B Preferred Stock, par value $0.01 per share (the "Series B Preferred Stock"), at a price per share of $4.85 for an aggregate purchase price of approximately $7.0 million. Each share of Series B Preferred Stock issued pursuant to the Series B Purchase Agreement is initially convertible into shares of our common stock at a rate of 1-for-1, which conversion rate is subject to further adjustment as set forth in the Certificate of Designation of Series B Convertible Preferred Stock.

In connection with the Series B financing, we also entered into a Registration Rights Agreement, dated March 5, 2014, with the 2014 Third Security Investors, pursuant to which we granted certain demand, "piggy-back" and S-3

registrations rights covering the resale of the shares of common stock underlying the Series B Preferred Stock issued pursuant to the Series B Purchase Agreement and all shares of common stock issuable upon any dividend or other distribution with respect thereto.

The Series B financing required the repricing and issuance of additional common stock warrants to the holders of warrants issued in the Private Placement. The exercise price of the warrants decreased from $12.96 per share to $11.73 per share and the number of shares issuable upon exercise of the warrants increased from 1,097,600 to 1,212,665.

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

The Series B Preferred Stock was converted into common stock on January 6, 2016 (See Note 15 - “Subsequent Events - Conversion of Preferred Stock”).

Preferred Stock Dividends.

We have cumulative undeclared dividends on our Series A Convertible Preferred Stock and Series B Preferred Stock (collectively “Preferred Stock”). At December 31, 2014, we had a recorded liability of $3.1 million for these undeclared dividends. Since dividends should generally not be recognized as a liability until declared, the $3.1 million liability was reversed in 2015 with an offset to accumulated deficit.

For the twelve months ended December 31, 2015 and 2014, we had cumulative undeclared dividends on our Preferred Stock of $4.4 million and $3.1 million, respectively. In accordance with the FASB’s Accounting Standards Codification Topic 260-10-45-11, “Earnings per Share”, these dividends were added to the net loss per share calculation. The accrued dividends were paid through the issuance of common stock on January 6, 2016 (See Note 15 - “Subsequent Events - Conversion of Preferred Stock”).

12. EQUITY INCENTIVE PLAN

The Company’s 2006 Equity Incentive Plan (the “Plan”) allows the Company to make awards of various types of equity-based compensation, including stock options, dividend equivalent rights (“DERs”), stock appreciation rights (“SARs”), restricted stock, restricted stock units, performance units, performance shares and other awards, to employees and directors of the Company. As of December 31, 2015, the Company was authorized to issue 1,666,666 shares under the Plan; provided, that no more than 1,250,000 of such shares may be used for grants of restricted stock, restricted stock units, performance units, performance shares and other awards.

The Plan is administered by the Compensation Committee of the Board of Directors (the “Committee”), which has the authority to set the number, exercise price, term and vesting provisions of the awards granted under the Plan, subject to the terms thereof. Either incentive or non-qualified stock options may be granted to employees of the Company, but only non-qualified stock options may be granted to non-employee directors and advisors. However, in either case, the Plan requires that stock options must be granted at exercise prices not less than the fair market value of the common stock on the date of the grant. Options issued under the plan vest over periods as determined by the Committee and expire 10 years after the date the option was granted.

For the years ended December 31, 2015 and 2014, we recorded compensation expense of $0.6 million and $0.9 million, respectively within selling, general and administrative expense. As of December 31, 2015, there was $0.4 million of unrecognized compensation expense related to unvested stock awards, which is expected to be recognized over a weighted average period of approximately 1.3 years.

The fair value of the options and SARs granted during 2015 was estimated on their respective grant dates using the Black-Scholes option pricing model. The Black-Scholes model was used with the following assumptions: risk-free interest rates of 1.32% to 1.91%, based on the U.S. Treasury yield in effect at the time of grant; dividend yields of zero percent; expected lives of four to six years, based on historical exercise activity; and volatility of 83% to 86% for grants made during the year ended December 31, 2015 based on the historical volatility of our stock over a time that is consistent with the expected life of the option.

The fair value of the options granted during 2014 was estimated on their respective grant dates using the Black-Scholes option-pricing model. The Black-Scholes model was used with the following assumptions: risk-free interest rates of 1.50% to 1.74%, based on the U.S. Treasury yield in effect at the time of grant; dividend yields of zero percent; expected lives of four to five years, based on historical exercise activity; and volatility of 82% to 105% for grants made during the year ended December 31, 2014 based on the historical volatility of our stock over a time that is consistent with the expected life of the option.

The weighted average grant date fair value per share of options granted during the years ended December 31, 2015 and 2014 was $0.96 and $3.51 respectively.

Stock Options.

The following table summarizes stock option activity under the Plan during the year ended December 31, 2015:

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

	Number of Options	Weighted Average Exercise Price
Outstanding at January 1, 2015	685,984	$6.56
Granted	665,560	1.50
Forfeited	(154,189)	4.72
Expired	(89,561)	10.57
Outstanding at December 31, 2015	1,107,794	$3.45
Exercisable at December 31, 2015	417,968	$5.28

All stock options outstanding were issued to employees, officers or outside directors.
As of December 31, 2015, 945,685 outstanding options were vested or expected to vest. The weighted average exercise price of these options was $3.45 and the aggregate intrinsic value was zero with a remaining weighted average contractual life of 8.5 years.
As of December 31, 2015, 417,968 options were exercisable with a weighted average exercise price of $5.28 and an aggregate intrinsic value of zero. The weighted average contractual life of these options was 7.8 years.
No options were exercised in 2015 or 2014.
The total fair value of awards that vested during 2015 and 2014 was $0.8 million and $0.6 million, respectively.
Stock Appreciation Rights (“SARs”).
The following table summarizes SARs activity under the Plan during the year ended December 31, 2015:

	Number of SARs	Weighted Average Exercise Price
Outstanding at January 1, 2015	98,333	$4.14
Granted	—	—
Forfeited	—	—
Expired	—	—
Outstanding at December 31, 2015	98,333	$4.14
Exercisable at December 31, 2015	68,220	$4.23

All SARs outstanding were issued to officers.
As of December 31, 2015, 98,333 outstanding SARs shares were vested or expected to vest. The weighted average exercise price of these options was $4.14 and the aggregate intrinsic value was zero with a remaining weighted average contractual life of 7.9 years.
As of December 31, 2015, 68,220 SARs shares were exercisable and no SARs shares were exercised in 2015 or 2014.
At December 31, 2015, a liability of less than $0.1 million was recorded in accrued expenses.

13. FAIR VALUE

FASB guidance on fair value measurements, which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements for our financial assets and liabilities, as well as for other assets and liabilities that are carried at fair value on a recurring basis in our consolidated financial statements.
FASB guidance establishes a three-level fair value hierarchy based upon the assumptions (inputs) used to price assets or liabilities. The three levels of inputs used to measure fair value are as follows:
Level 1—Unadjusted quoted prices in active markets for identical assets or liabilities;

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

Level 2—Observable inputs other than those included in Level 1, such as quoted prices for similar assets and liabilities in active markets or quoted prices for identical assets or liabilities in inactive markets; and
Level 3—Unobservable inputs reflecting our own assumptions and best estimate of what inputs market participants would use in pricing the asset or liability.

Debt
Our long term debt is considered a Level 3 liability for which book value approximates fair market value due to the variable interest rate it bears.

Common Stock Warrant Liability
Certain of our issued and outstanding warrants to purchase common stock do not qualify to be treated as equity, and accordingly are recorded as a liability. The Common Stock Warrant Liability represents the fair value of the 2.2 million warrants issued in February 2012 (as adjusted pursuant to the terms of the 2012 warrants). We are required to record these instruments at fair value at each reporting date and changes are recorded as a non-cash adjustment to earnings. The gains or losses included in earnings are reported in other income (expense) in our Statement of Operations. Management does not believe that this liability will be settled by a use of cash.
The Common Stock Warrant Liability is considered a Level 3 financial instrument and is valued using a Monte Carlo simulation. This method is well suited to value options with non-standard features, such as anti-dilution protection. A Monte Carlo simulation model uses repeated random sampling to simulate significant uncertainty in inputs. Assumptions and inputs used in the valuation of the common stock warrants are broken down into four sections: Static Business Inputs; Static Technical Inputs; Simulated Business Inputs; and Simulated Technical Inputs.
Static Business Inputs include: Our equity value, which was estimated using our stock price of $1.07 as of December 31, 2015; the amount of the down-round financing, the timing of the down-round financing, the expected exercise period of 1.11 years from the valuation date and the fact that no other potential fundamental transactions are expected during the term of the common stock warrants.
Static Technical Inputs include: volatility of 104% based on implied and historical rates over the expected term and the risk-free interest rate of 0.69% based on the 1-year U.S. Treasury yield.
Simulated Business Inputs include: the probability of down-round financing, which was estimated to be 100% for simulated equity values below the down-round financing cut-off point.
Simulated Technical Inputs include: our equity value in periods 1-10 follows a geometric Brownian motion and is simulated over 10 independent six-month periods; a down-round financing event was randomly simulated in an iteration based on the 100% discrete probability of a down-round financing for those iterations where our simulated equity value at the expected timing of down-round financing was below the down-round financing cut-off point.

During the year ended December 31, 2015, the changes in the fair value of the liability measured using significant unobservable inputs (Level 3) was comprised of the following:

	Dollars in Thousands For the Year Ended December 31, 2015
Balance at December 31, 2014	$145
Total gains or losses:	
Recognized in earnings	205
Balance at December 31, 2015	$350

The change in unrealized gains or losses of Level 3 liabilities is included in earnings and is reported in other income (expense) in our Statement of Operations.

14. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION

63

TRANSGENOMIC, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2015 and 2014

We have one operating segment as of December 31, 2015, Laboratory Services. Our revenues from continuing operations are primarily generated from pharmacogenomics research services supporting Phase II and Phase III clinical trials conducted by pharmaceutical and biotechnology companies.

Based on location of end customers, all of our revenues from continuing operations are attributed to the United States. All of our long-lived assets are also located within the United States.

15. SUBSEQUENT EVENTS

Conversion of Preferred Stock

On January 6, 2016, the Company entered into a Conversion Agreement (the "Conversion Agreement") with the holders (the "Preferred Holders") of all of the Company's outstanding shares of Series A Convertible Preferred Stock, par value $0.01 per share (the "Series A Preferred"), and Series B Convertible Preferred Stock, par value $0.01 per share (the "Series B Preferred"), pursuant to which, among other things, the Preferred Holders: (1) elected to convert all of the outstanding shares of Series A Preferred and Series B Preferred into shares of the Company's common stock, par value $0.01 per share ("Common Stock"), in each case in accordance with the terms thereof, and (2) agreed that all accrued and unpaid dividends on the Series A Preferred and Series B Preferred would be paid by the Company in shares of Common Stock at a rate of $1.00 per share of Common Stock (collectively, the "Conversion").

The outstanding shares of Series A Preferred were convertible into shares of Common Stock at a rate of 1-for-3, and the outstanding shares of Series B Preferred were convertible into shares of Common Stock at a rate of 1-for-1. Prior to the entry into the Conversion Agreement, there were 2,586,205 shares of Series A Preferred outstanding, which were converted into 862,057 shares of Common Stock, and 1,443,297 shares of Series B Preferred outstanding, which were converted into 1,443,297 shares of Common Stock, for an aggregate of 2,305,354 shares of Common Stock issued upon conversion of the Series A Preferred and Series B Preferred (the "Conversion Shares"). At the time of the entry into the Conversion Agreement, there were $3,681,591.90 in accrued and unpaid dividends on the outstanding shares of Series A Preferred, which were converted, in accordance with the Conversion Agreement, into 3,681,590 shares of Common Stock, and $793,236.17 in accrued and unpaid dividends on the outstanding shares of Series B Preferred, which were converted, in accordance with the terms of the Conversion Agreement, into 793,235 shares of Common Stock, for an aggregate of 4,474,825 shares of Common Stock issued pursuant to the accrued and unpaid dividends on the Series A Preferred and Series B Preferred (the "Dividend Shares"). Therefore, in connection with the full conversion of the Series A Preferred and Series B Preferred, plus the conversion of all accrued and unpaid dividends thereon, the Company issued an aggregate of 6,780,179 shares of Common Stock to the Preferred Holders on January 6, 2016.

Following the conversion of the shares of Series A Preferred and Series B Preferred into common stock, no shares of Series A Preferred or Series B Preferred remain outstanding.

Amended Loan and Security Agreement

On January 6, 2016, the Company entered into an eight amendment the Loan Amendment. The eight amendment, among other things, (1) provides that the Lenders will waive specified events of default under the terms of the Loan Agreement, (2) reduces the Company's future minimum revenue covenants under the Loan Agreement, (3) extends the maturity date of the Loan Agreement until November 1, 2017, and (4) provides for the repayment of an overadvance of $750,000 previously provided by the Lenders to the Company pursuant to the Loan Agreement.

During the first quarter of 2016, the overadvance that existed at December 31, 2015 was repaid to the Lenders and $0.2 million was received from certain of the Lenders and another lender affiliate in connection with the equity offering made on January 6, 2015.

Issuance of Preferred Stock and Common Stock Warrants

On January 6, 2016, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain accredited investors (the “Investors”), pursuant to which, on January 8, 2016, the Company sold to the Investors, and the Investors purchased from the Company (the “Offering”), an aggregate of approximately $2.2 million of units (the “Units”) consisting of (1) an aggregate of 2,365,243 shares (the “A-1 Preferred Shares”) of Series A-1 Convertible Preferred Stock, par value $0.01 per share, of the Company (the “A-1 Preferred”), and (2) warrants (the “Warrants”) to purchase up to an aggregate of 1,773,929 shares

of common stock, par value $0.01 per share, of the Company (the "Common Stock"). Each Unit was sold to the Investors at a purchase price of $0.93 per Unit. The A-1 Preferred Shares are convertible into shares of Common Stock at an initial rate of 1-for-1, which conversion rate is subject to further adjustment as set forth in the Company's Certificate of Designation of Series A-1 Convertible Preferred Stock, which was filed with the Secretary of State of the State of Delaware on January 8, 2016 (the "Series A-1 Certificate of Designation"). Pursuant to the terms of the Series A-1 Certificate of Designation, the holders of the A-1 Preferred Shares will generally be entitled to that number of votes as is equal to the product obtained by multiplying: (a) the number of whole shares of Common Stock into which the A-1 Preferred may be converted as of the record date of such vote or consent, by (b) 0.93, rounded down to the nearest whole number. Therefore, every 1.075269 shares of A-1 Preferred will generally initially be entitled to one vote.

The Warrants are immediately exercisable, have a term of five years and have an exercise price of $1.21 per share of Common Stock. Each Warrant includes both cash and "cashless exercise" features and an exchange feature whereby the holder of the Warrant may exchange (the "Exchange Right") all or any portion of the Warrant for a number of shares of Common Stock equal to the quotient obtained by dividing the "Exchange Amount" by the closing bid price of the Common Stock on the second trading day prior to the date the Warrant is exchanged (the "Exchange Price"). Under the Warrants, the "Exchange Amount" is based upon a Black Scholes option pricing model, and the aggregate Exchange Amount under all of the Warrants will be $1,436,882, subject to adjustment to the extent that the risk-free U.S. Treasury rate fluctuates between the date of issuance of the Warrants and the date the Warrants are exchanged. Each Warrant provides that the number of shares that may be issued upon exercise of the Exchange Right is limited to the number of shares that may be purchased pursuant to the terms of the Warrant, unless the Company has previously obtained stockholder approval or approval from The Nasdaq Stock Market LLC to issue any additional shares of Common Stock (the "Additional Shares") pursuant to the Exchange Right (the "Required Approvals"). For any Exchange Right exercised more than 90 days following the issuance of the Warrants, if the Company has not obtained either of the Required Approvals, the Company will be required to pay the Warrant holder an amount in cash for any Additional Shares that it cannot issue without the Required Approvals based on the Exchange Amount.

The Warrants further provide that, to the extent the closing bid price of the Common Stock on the second trading day prior to the date the Warrant is exchanged is less than $0.50, the Exchange Price will be deemed to be equal to $0.50, and, in addition to issuing shares of Common Stock based on this Exchange Price, the Company will be required to pay to the Warrant holder an amount in cash equal to the product obtained by multiplying (a) $0.50 minus the closing bid price of the Common Stock on the second trading day prior to the date the Warrant is exchanged, by (b) the aggregate number of shares of Common Stock issued to the Warrant holder by the Company in such exchange at an Exchange Price equal to $0.50. Therefore, if the Required Approvals are obtained, based on the Exchange Amount of $1,436,882 (which, as noted above, is subject to adjustment to the extent that the risk-free U.S. Treasury rate fluctuates between the date of the issuance of the Warrants and the date the Warrants are exchanged), the maximum number of shares of Common Stock issuable pursuant to the Exchange Right in the Warrants will be 2,873,765. In addition, if, for example, assuming an Exchange Amount of $1,436,882, the closing bid price of the Common Stock on the second trading day prior to the date the Warrants are exchanged is $0.25, the Company would be required to pay to the Warrant holders cash in an aggregate amount of $718,441 in addition to issuing the Warrant holders 2,873,765 shares.

In accordance with the terms of the Purchase Agreement, the Company amended that certain Series A Warrant to purchase up to an aggregate of 1,161,972 shares of Common Stock previously issued by the Company to an affiliate of one of the Investors on July 7, 2015 (the "Original Warrant"), as previously reported by the Company on its Amendment No. 1 to Current Report on Form 8-K/A, filed with the Securities and Exchange Commission (the "SEC")

on July 7, 2015 (as so amended, the "Amended Warrant"). The Amended Warrant amends the Original Warrant to provide that the Amended Warrant is subject to the same terms and conditions as the Warrants and, therefore, includes both cash and "cashless exercise" features and an Exchange Right whereby the number of shares issuable pursuant to the Exchange Right is equal to the "Amended Warrant Exchange Amount", which is based on a Black Scholes option pricing model, and will be $941,197, subject to adjustment to the extent that the risk-free U.S. treasury rate fluctuates between the date of issuance of the Amended Warrant and the date the Amended Warrant is exchanged. The Amended Warrant is exercisable for up to 1,161,972 shares of Common Stock in the event the Company has obtained either of the Required Approvals with respect to the Amended Warrant. In the event the Amended Warrant holder exercises the Amended Warrant more than 90 days following the issuance of the Amended Warrant, if the Company has not obtained either of the Required Approvals, the Company will be required to pay the Amended Warrant holder an amount in cash for the shares of Common Stock that the Company cannot issue under the Amended Warrant pursuant to such exercise without the Required Approvals based on the Amended Warrant Exchange Amount.

The Amended Warrant also provides that, to the extent the closing bid price of the Common Stock on the second trading day prior to the date the Amended Warrant is exchanged is less than $0.50, the Exchange Price will be deemed to be equal to $0.50, and, in addition to issuing shares of Common Stock based on this Exchange Price (assuming receipt of the Required Approvals), the Company will be required to pay to the Amended Warrant holder an amount in cash equal to the product obtained by multiplying (a) $0.50 minus the closing bid price of the Common Stock on the second trading day prior to the date the Amended Warrant is

exchanged, by (b) the aggregate number of shares of Common Stock issued to the Amended Warrant holder by the Company in such exchange at an Exchange Price equal to $0.50. Therefore, if the Required Approvals are obtained, based on the Amended Warrant Exchange Amount of $941,197 (which, as noted above, is subject to adjustment to the extent that the risk-free U.S. Treasury rate fluctuates between the issuance of the Amended Warrant and the date the Amended Warrant is exchanged), the maximum number of shares of Common Stock issuable pursuant to the Exchange Right in the Amended Warrant will be 1,882,395. In addition, if, for example, assuming an Amended Warrant Exchange Amount of $941,197, the closing bid price of the Common Stock on the second trading day prior to the date the Amended Warrant is exchanged is $0.25, the Company would be required to pay to the Amended Warrant holder cash in an aggregate amount of $470,599 in addition to issuing the Amended Warrant holder 1,882,395 shares.

In connection with entering into the Securities Purchase Agreement, the Company also entered into a Registration Rights Agreement, dated January 8, 2016, with the Investors. The Registration Rights Agreement requires that the Company file with the SEC a registration statement to register for resale the shares of Common Stock issuable upon conversion of the A-1 Preferred Shares (the “A-1 Preferred Conversion Shares”) and the shares of Common Stock issuable upon exercise of the Warrants and the Amended Warrant (collectively, the “Warrant Shares”) by January 23, 2016.

Craig-Hallum Capital Group LLC (the “Placement Agent”) served as the sole placement agent for the Offering. In consideration for services rendered as the Placement Agent in the Offering, the Company (1) paid to the Placement Agent cash commissions equal to approximately $140,000, or 7.0% of the gross proceeds received in the Offering, excluding any proceeds received from Third Security, LLC or any of its affiliates; (2) issued to the Placement Agent, for a price of $50, a five-year warrant to purchase up to 107,527 shares of Common Stock at an exercise price of $1.21 per share (the “Agent Warrant”), which is subject to the same terms as the Warrants except that the Agent Warrant is not exercisable until July 8, 2016 and does not contain the Exchange Right; and (3) reimbursed the Placement Agent for reasonable out-of-pocket expenses, including fees paid to the Placement Agent’s legal counsel, incurred in connection with the Offering, which reimbursable expenses did not exceed $50,000.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures.
None.

Item 9A. Controls and Procedures.

(a) Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report, management performed, with the participation of our Chief Executive Officer and Interim Chief Financial Officer, an evaluation of the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission (the "SEC"), and that such information is accumulated and communicated to management including our Chief Executive Officer and our Interim Chief Financial Officer, to allow timely decisions regarding required disclosures. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and no evaluation of controls and procedures can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected. Management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation, the Chief Executive Officer and Interim Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2015.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining an adequate system of internal control over financial reporting. Our system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets;
- provide reasonable assurance that our transactions are recorded as necessary to permit preparation of our financial statements in accordance with accounting principles generally accepted in the United States of America, and that our receipts and expenditures are being made only in accordance with authorizations of our management and our directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Further, because of changes in conditions, effectiveness of internal controls over financial reporting may vary over time. Our system contains self-monitoring mechanisms, and actions are taken to correct deficiencies as they are identified.

Management has conducted, with the participation of our Chief Executive Officer and our Interim Chief Financial Officer, an assessment, including testing of the effectiveness, of our internal control over financial reporting as defined in Rule 13(a)-15(f) under the Exchange Act as of December 31, 2014. Management's assessment of internal control over financial reporting was conducted using the criteria in the 2013 Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on that assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2015.

This Annual Report does not include an attestation report of Transgenomic's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to Item 308(b) of Regulation S-K, which permits the Company to provide only management's report in this Annual Report.

(c) Changes in internal control over financial reporting

During the period ended December 31, 2015, we completed our remediation efforts related to our controls over proper timing and recognition of revenue and controls related to the elements used in our analysis and evaluation of the allowance for doubtful accounts. As a result of the completed remediation efforts noted below, there were improvements in internal control over financial reporting during the fiscal year 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. There were no other changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Remediation Efforts to Address Material Weaknesses

In our Annual Report on Form 10-K for the year ended December 31, 2014, management identified the following two material weaknesses in our internal control over financial reporting in our Patient Testing business operations in New Haven, Connecticut. The ineffectiveness of the control environment did not result in an adjustment to the financial statements or a restatement of prior year financial statements:

- Design and Maintenance of Controls Surrounding Revenue Recognition. The Company did not design and maintain effective controls over proper timing and recognition of revenue. The Company's procedures and controls were not adequately designed to ensure that revenues were timely identified and measured to ensure that revenue was recorded correctly within the appropriate period.

- Design and Maintenance of Controls Surrounding Determination of Allowance for Doubtful Accounts. The Company did not design and maintain effective controls over the elements used in its analysis and evaluation of the allowance for doubtful accounts to ensure that the allowance for doubtful was reasonably stated.

A material weakness is a control deficiency, or combination of control deficiencies, that result in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected.

In response to the material weaknesses, management developed remediation plans to address the control deficiencies identified in 2014. We implemented the following remediation actions during 2015:

Design and Maintenance of Controls Surrounding Revenue Recognition.

- Effective for the quarter ending March 31, 2015, additional review and reconciliation steps were added to the Lab revenue recognition process to ensure that revenue is appropriately recognized in the proper period. The review and reconciliation process was enhanced to include, among other steps, (i) a reconciliation of proof of delivery (fax confirmation) for invoiced and unbilled reports (ii) a review of error processing queues.
- Effective for the Quarter ended September 30, 2015 we added the following control procedures.
  - (i) A "dump" file from Uniflow, the " Uniflow Report" was generated which included all fax confirmed tests for the month,
  - (ii) The Uniflow Report was used to verify items on the Xifin End Of Month billed report and;
  - (iii) Items from the Uniflow Report not found on the Xifin End of Month were used to created the unbilled revenue file for the month.
- An additional control procedure was put in place in the fourth quarter to ensure that items recognized as unbilled used the proper pricing table and that unbilled items when billed would reflect the same pricing.

Design and Maintenance of Controls Surrounding Determination of Allowance for Doubtful Accounts.

- Effective for the fiscal year ending December 31, 2015, additional review and reconciliation steps were added to the allowance for doubtful account process. The review and reconciliation included, among other steps, (i) a review of the payor and client accounts receivable aging (ii) review of write offs, (iii) a review of current and historical payment

trends, (iv) a review of actual cash collections and a hindsight analysis.

Management has determined that the remediation actions discussed above were effectively designed and demonstrated effective operation for a sufficient period of time the enable us to conclude that the 2014 material weaknesses have been remediated as of December 31, 2015.

Item 9B. Other Information.

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this item is incorporated by reference to the information set forth in the sections titled "Board of Directors and Committees", "Section 16(a) Beneficial Ownership Reporting Compliance", "Code of Business Conduct and Ethics", "Corporate Governance - Committees of our Board of Directors", "Corporate Governance - Audit Committee" and "Corporate Governance - Compensation Committee" in our definitive proxy statement to be filed with the Securities and Exchange Commission (the "SEC") in connection with the annual meeting of stockholders to be held in 2016 (the "2016 Proxy Statement"). The information required by this item related to the executive officers can be found in the section captioned "Executive Officers of the Registrant" under Part I, "Item 1. Our Business" of this Annual Report on Form 10-K, and is also incorporated herein by reference.

Item 11. Executive Compensation.

The information required by this item is incorporated by reference to the information set forth in the sections titled "2015 Executive Compensation" and "Director Compensation" in the 2016 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.
The information required by this item is incorporated by reference to the information set forth in the sections titled "Beneficial Ownership of Common Stock", "Beneficial Ownership of Preferred Stock" and "Equity Compensation Plan Information" in the 2016 Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this item is incorporated by reference to the information set forth in the sections titled "Review and Approval of Related Person Transactions" and "Director Independence" in the 2016 Proxy Statement.

Item 14. Principal Accounting Fees and Services.

The information required by this item is incorporated by reference to the information set forth in the section titled "Independent Registered Public Accounting Firm" in the 2016 Proxy Statement.

Part IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this report:

1 Financial Statements. The following financial statements of the Registrant are included in response to Item 8 of this report:

Report of Independent Registered Public Accounting Firm.
Consolidated Balance Sheets of the Registrant and Subsidiary as of December 31, 2015 and 2014.
Consolidated Statements of Operations of the Registrant and Subsidiary for the years ended December 31, 2015 and 2014.
Consolidated Statements of Comprehensive Loss of the Registrant and Subsidiary for the years ended December 31, 2015 and 2014.
Consolidated Statements of Stockholders' Equity (Deficit) of the Registrant and Subsidiary for the years ended December 31, 2015 and 2014.
Consolidated Statements of Cash Flows of the Registrant and Subsidiary for the years ended December 31, 2015 and 2014.
Notes to Consolidated Financial Statements of the Registrant and Subsidiary.

2 Financial Statement Schedules.

All financial statement schedules are omitted because the information is inapplicable or presented in the notes to the financial statements.

3 Exhibits. The following exhibits are filed as required by Item 15(a)(3) of this report. Exhibit numbers refer to the paragraph numbers under Item 601 of Regulation S-K:

†2.1	Asset Purchase Agreement among the Registrant, Scoli Acquisition Sub, Inc. and Axial Biotech, Inc. dated August 27, 2012 (incorporated by reference to Exhibit 2.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 8, 2012).
3.1	Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 14, 2005).
3.2	Certificate of Amendment of Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 29, 2012).
3.3	Certificate of Amendment of Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on January 28, 2014).
3.4	Certificate of Amendment of Certificate of Designation of Series A Convertible Preferred Stock of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on March 6, 2014).
3.5	Certificate of Designation of Series B Convertible Preferred Stock of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on March 6, 2014).
3.6	Certificate of Designation of Series A-1 Convertible Preferred Stock of Transgenomic, Inc., as filed with the Secretary of State of the State of Delaware on January 8, 2016 (incorporated by reference to Exhibit

3.1 to the Registrant's Current Report on Form 8-K filed on January 11, 2016 at 7:33 a.m. Eastern Time).

3.7	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3(ii) to the Registrant's Current Report on Form 8-K filed on May 25, 2007).
4.1	Form of Certificate of the Registrant's Common Stock (incorporated by reference to Exhibit 4 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).
4.2	Form of Warrant issued by the Registrant to the Third Security Entities on February 7, 2012 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on February 7, 2012).
4.3	Form of Warrant issued by the Registrant to the Investors on February 7, 2012 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on February 7, 2012).
4.4	Form of Registration Rights Agreement entered into by and among the Registrant, the Third Security Entities and the Investors dated February 2, 2012 (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on February 7, 2012).
4.5	Registration Rights Agreement, entered into by and among the Registrant and the Investors, dated January 24, 2013 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K/A filed on January 31, 2013).
4.6	Form of Warrant issued by the Registrant to the Investors on January 30, 2013 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K/A filed on January 31, 2013).
4.7	Registration Rights Agreement, dated as of March 5, 2014, by and among the Registrant, Third Security Senior Staff 2008 LLC, Third Security Staff 2014 LLC and Third Security Incentive 2010 LLC (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on March 6, 2014).
4.8	Securities Purchase Agreement, dated as of October 22, 2014, by and among Transgenomic, Inc. and the Investors (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on October 22, 2014).
4.9	Form of Warrant issued by Transgenomic, Inc. to the Investors and the advisor on October 22, 2014 (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on October 22, 2014).
4.10	Unsecured Convertible Promissory Note Purchase Agreement, dated as of December 31, 2014, by and among Transgenomic, Inc. and the Investors (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 7, 2015).
4.11	Form of Unsecured Convertible Promissory Note issued by Transgenomic, Inc. to the Investor pursuant to the Unsecured Convertible Promissory Note Purchase Agreement, dated as of December 31, 2014 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on January 7, 2015).
4.12	Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on February 27, 2015).
4.13	

	Registration Rights Agreement, dated June 30, 2015, by and among Transgenomic, Inc. and the Investors (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K/A filed on July 7, 2015).
4.14	Form of Series B Warrant to Purchase Common Stock issued by Transgenomic, Inc. to an Investor on July 7, 2015 (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K/A filed on July 7, 2015).
4.15	Form of Series A Warrant to Purchase Common Stock issued by Transgenomic, Inc. to Investors on July 7, 2015 (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K/A filed on July 7, 2015).
4.16	Form of Warrant to Purchase Common Stock issued by Transgenomic, Inc. to the Placement Agent on July 7, 2015 (incorporated by reference to Exhibit 4.4 to the Registrant's Current Report on Form 8-K/A filed on July 7, 2015).
4.17	Registration Rights Agreement, by and among Transgenomic, Inc. and the Investors, dated January 8, 2016 (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on January 11, 2016 at 7:33 a.m. Eastern Time).

4.18	Form of Warrant, issued by Transgenomic, Inc. to the Investors on January 8, 2016 (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on January 11, 2016 at 7:33 a.m. Eastern Time).
4.19	Form of Amended Warrant, issued by Transgenomic, Inc. to an affiliate of an Investor on January 8, 2016 (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on January 11, 2016 at 7:33 a.m. Eastern Time).
4.20	Form of Warrant, issued by Transgenomic, Inc. to the Placement Agent on January 8, 2016 (incorporated by reference to Exhibit 4.4 to the Registrant's Current Report on Form 8-K filed on January 11, 2016 at 7:33 a.m. Eastern Time).
*10.1	The Registrant's 2006 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 28, 2014).
*10.2	1999 UK Approved Stock Option Sub Plan of the Registrant (incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).
10.3	License Agreement, dated August 20, 1997, between the Registrant and Leland Stanford Junior University (incorporated by reference to Exhibit 10.15 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).
10.4	License Agreement, dated December 1, 1989, between Cruachem Holdings Limited (a wholly owned subsidiary of the Registrant) and Millipore Corporation (incorporated by reference to Exhibit 10.13 to the Registrant's Annual Report on Form 10-K filed on March 25, 2002).
10.5	Sublicense Agreement, dated October 1, 1991, between Cruachem Holdings Limited (a wholly owned subsidiary of the Registrant) and Applied Biosystems, Inc. (incorporated by reference to Exhibit 10.14 to the Registrant's Annual Report on Form 10-K filed on March 25, 2002).
10.6	Missives, dated May 17, 2002, between Cruachem Limited (a wholly-owned subsidiary of the Registrant) and Robinson Nugent (Scotland) Limited (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on August 14, 2002).
10.7	License Amendment Agreement, dated June 2, 2003, by and between Geron Corporation and the Registrant (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on August 12, 2003).
10.8	Supply Agreement, dated January 1, 2000, between the Registrant and Hitachi Instruments (incorporated by reference to Exhibit 10.16 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).
10.9	License Agreement between the Registrant and the Dana-Farber Cancer Institute dated October 8, 2009 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 5, 2009).
10.10	Securities Purchase Agreement, entered into by and among the Registrant and the Investors, dated January 24, 2013 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K/A filed

	on January 31, 2013).
10.11	Forbearance Agreement, dated February 7, 2013, by and between the Registrant and Dogwood Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on February 8, 2013).
10.12	Loan and Security Agreement among the Registrant, Third Security Senior Staff 2008 LLC, as administrative agent and a lender, and the other lenders party thereto, dated March 13, 2013 (incorporated by reference to Exhibit 10.39 to the Registrant's Annual Report on Form 10-K filed on March 14, 2013).
10.13	First Amendment to Loan and Security Agreement among the Registrant, Third Security Senior Staff 2008 LLC, as administrative agent and a lender, and the other lenders party thereto, dated August 2, 2013 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on August 6, 2013).
*10.14	Employment Agreement between the Registrant and Paul Kinnon, effective September 30, 2013 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 30, 2013).

*10.15	Offer Letter, dated November 6, 2012, by and between Transgenomic, Inc. and Leon Richards (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 3, 2015).
*10.16	Amendment No. 1 to Offer Letter, dated June 2, 2015, by and between Transgenomic, Inc. and Leon Richards (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on June 3, 2015).
*10.17	Form of Incentive Stock Option Agreement between the Registrant and Paul Kinnon, effective September 30, 2013 (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on November 14, 2014).
*10.18	Form of Stock Appreciation Rights Agreement between the Registrant and Paul Kinnon, effective September 30, 2013 (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed on November 14, 2014).
*10.19	Form of Stock Appreciation Rights Agreement under the 2006 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on September 30, 2013).
10.20	Second Amendment to Loan and Security Agreement among the Registrant, Third Security Senior Staff 2008 LLC, as administrative agent and a lender, and the other lenders party thereto, effective October 31, 2013 (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed on November 14, 2014).
10.21	Limited Waiver and Third Amendment to Loan and Security Agreement among Transgenomic, Inc., Third Security Senior Staff 2008 LLC, as administrative agent and a lender, and the other lenders party thereto, dated January 27, 2014 (incorporated by reference to Exhibit 10.21 to the Registrant's Annual Report on Form 10-K filed on March 27, 2014).
10.22	Fourth Amendment to Loan and Security Agreement among Transgenomic, Inc., Third Security Senior Staff 2008 LLC, as administrative agent and a lender, and the other lenders party thereto, dated March 3, 2014 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on March 6, 2014).
10.23	Series B Convertible Preferred Stock Purchase Agreement, dated as of March 5, 2014, by and among Transgenomic, Inc. and Third Security Senior Staff 2008 LLC, Third Security Staff 2014 LLC and Third Security Incentive 2010 LLC (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on March 6, 2014).
+10.24	Collaboration Agreement, dated as of October 9, 2013, by and between the Registrant and PDI, Inc. (incorporated by reference to Exhibit 10.24 to the Registrant's Annual Report on Form 10-K/A filed on September 5, 2014).
+10.25	Surveyor Kit Patent, Technology, and Inventory Purchase Agreement, dated as of July 1, 2014, by and between the Registrant and Integrated DNA Technologies, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 12, 2014).
10.26	Limited Waiver and Fifth Amendment to Loan and Security Agreement among Transgenomic, Inc., Third Security Senior Staff 2008 LLC, as administrative agent and a lender, and the other lenders party thereto,

	dated October 22, 2014 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on October 22, 2014).
10.27	Unsecured Convertible Promissory Note Purchase Agreement, dated as of December 31, 2014, by and between Transgenomic, Inc. and the Investor (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 7, 2015).
10.28	Purchase Agreement by and between the Registrant and Craig-Hallum Capital Group LLC, dated February 27, 2015 (incorporated by reference to Exhibit 1.1 to the Registrant's Current Report on Form 8-K filed on February 27, 2015).
10.29	Limited Waiver and Sixth Amendment to Loan and Security Agreement by and among the Registrant, Third Security Senior Staff 2008 LLC, as administrative agent and a lender, and the other lenders party thereto, dated April 1, 2015 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on April 2, 2015).
10.30	Securities Purchase Agreement, by and among Transgenomic, Inc. and the Investors, dated June 30, 2015 (incorporated by reference to Exhibit 10.1 to the Registrant's Amendment No. 1 to Current Report on Form 8-K/A filed on July 7, 2015).