TRANSGENOMIC INC
Form 10-K
February 25, 2010
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2009

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)	(IRS Employer Identification Number)

12325 Emmet Street

Omaha, NE 68164 **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**
None	N/A

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

Common Stock, par value $.01 per share

(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 _____No _____

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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 _____

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 definition of accelerated filer , large 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 x

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2).

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 OTC Bulletin Board on the last business day of the registrant s most recently completed second quarter was approximately $14.5 million.

At February 25, 2010, the registrant had 49,189,672 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant Proxy Statement relating to its 2010 Annual Meeting of Stockholders (the Proxy Statement) have been incorporated into Part III of this Report on Form 10-K.

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TRANSGENOMIC, INC.

Index to Form 10-K for the Fiscal Year Ended December 31, 2009

This Annual Report on Form 10-K references the following registered trademarks which are the property of Transgenomic, Inc.: DNASEP® Columns, WAVE® System, WAVEMAKER® Software, TRANSFORMING THE WORLD® for Laboratory Equipment, TRANSGENOMIC® and the Globe Logo®; MutationDiscovery.com® Website, OLIGOSEP® for Systems and Reagents, OPTIMASE® Polymerase, RNASEP® Columns, SURVEYOR® WAVE OPTIMIZED® reagents, and WAVE® MD Systems. Additionally, this Annual Report on Form 10-K references the following trademarks which are the property of Transgenomic, Inc.: MitoScreen Kits, ProtocolWriter Software, Navigator Software, THE POWER OF DISCOVERY® for Lab Reagents and Educational Programs, and SURVEYOR Nuclease®. All other trademarks or trade names referred to in this Annual Report on Form 10-K are the property of their respective owners.

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PART I

FORWARD-LOOKING STATEMENTS

This report, including Management s Discussion & Analysis, 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, Medicare/Medicaid/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, industry conditions, our ability to execute our operating plans, the success of our cost savings initiatives, competitive environment and related market conditions, actions of governments and regulatory factors affecting our business and other risks as described in our reports filed with the Securities and Exchange Commission. 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, should, will, would and 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 the forward-looking statements that we make for a number of reasons including those described in Item 1A, Risk Factors, and other factors identified by cautionary language used elsewhere in this 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.

The following discussion should be read together with our financial statements and related notes contained in this report. Results for the year ended December 31, 2009 are not necessarily indicative of results that may be attained in the future.

Item 1. Our Business

Transgenomic, Inc. (together with its Affiliates, the Company or Transgenomic) provides innovative products for the purification and analysis of nucleic acids used in the life sciences industry for research focused on molecular genetics and diagnostics. We also provide genetic variation analytical services to the medical research, clinical and pharmaceutical markets. Net sales are categorized as Instrument Related Business and Laboratory Services.

Instrument Related Business:

- Bioinstruments. Our flagship product is the WAVE® System which has broad applicability to genetic variation detection in both molecular genetic research and molecular diagnostics. There is a worldwide installed base of over 1,475 WAVE Systems

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as of December 31, 2009. We also distribute bioinstruments produced by other manufacturers (OEM Equipment) through our sales and distribution network. Service contracts to maintain installed systems are sold and supported by technical support personnel.

- Bioconsumables. The installed WAVE base and some third-party installed platforms generate a demand for consumables that are required for the continued operation of the bioinstruments. We develop, manufacture and sell these consumable products. In addition, we manufacture and sell consumable products that can be used on multiple, independent platforms. These products include SURVEYOR® Nuclease and a range of HPLC separation columns.

Laboratory Services:

- Molecular Clinical Reference Laboratory. The molecular clinical reference laboratory specializes in mitochondrial and molecular diagnostic testing including genetic testing for oncology, hematology and inherited disorders. Located in Omaha, Nebraska the molecular clinical reference laboratory operates in a Good Laboratory Practices compliant environment, is certified under the Clinical Laboratory Improvement Amendment (CLIA) as a high complexity lab and is accredited by CAP (College of American Pathologists).

- Pharmacogenomics Research Services. Pharmacogenomics research services are provided by our Contract Research Organization located in Omaha, Nebraska. It specializes in pharmacogenomic, biomarker and mutation discovery research serving the pharmaceutical and biomedical industries world-wide for disease research, drug and diagnostic development and clinical trial support.

Business Strategy

Our business strategy is to provide products and services to biomedical researchers, medical institutions, and diagnostic and pharmaceutical companies that are tied to advancements in the field of genomics and, increasingly, personalized medicine. Advances in genomics have fueled efforts to understand individual differences in disease susceptibility, disease progression, and response to therapy. Accordingly, a principal component of our strategy has and continues to be to establish our WAVE System as an industry standard in the biomedical research market and to develop additional markets for the WAVE System such as clinical research and diagnostics. For continued high quality support for our WAVE System and associated bioconsumables, we attained ISO90001:2000 certification for our Omaha manufacturing site in the fourth quarter of 2008 and have since been certified to the ISO9001:2008 standard in 2009.

Over the last few years our strategy has grown to include increasing concentration of our two Laboratory Services businesses. We have gained exposure to the translational and clinical research markets, laying the foundation for increasing our participation in the full value chain associated with activities ranging from basic biomedical research to development of diagnostic and therapeutic products to increasing opportunities for developing and manufacturing companion diagnostics. During the fourth quarter of 2005, our laboratory in Omaha, Nebraska was certified under the Clinical Laboratory Improvement Amendments and we received our first patient samples for molecular-based testing for hematology, oncology and certain inherited diseases for physicians and third-party laboratories to aid in patient diagnoses or pharmaceutical drug development and drug clinical trials. In December of 2008 we were awarded an accreditation by the Commission on Laboratory Accreditation of the College of American Pathologists (CAP) based on the results of an onsite inspection. We believe

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there is a significant opportunity for us to continue growing the demand for molecular-based personalized medicine by leveraging our technologies and experience gained from the genomic biomarker analysis that our Laboratory Services business has and will continue to provide to pharmaceutical and biopharmaceutical companies. In addition, we continue to seek out and evaluate new technologies and genomic based laboratory tests which will further extend our offerings in our Molecular Diagnostics Laboratory and our Pharmacogenomics Services Lab.

Sales and Marketing

We have sold our products to customers in over 50 countries. We use a direct sales and support staff for sales in the U.S. and Europe. Our sales and support team consists of regionally-based sales people, engineers and applications scientists to support our sales and marketing activities throughout the U.S. and Europe. For the rest of the world, we sell our products through dealers and distributors within local markets. We have over 35 dealers and distributors. The nature of our business does not generally lend itself to tracking and reporting sales backlog.

Customers

Customers include numerous leading academic and medical institutions in the U.S. and abroad. In addition, our customers also include a number of large, established pharmaceutical, biotech and commercial companies both in the U.S. and abroad. No customer accounted for more than 10% of our consolidated net sales for the years ended December 31, 2009 and 2008. For the year ended December 31, 2009 one customer made up 20% of the Laboratory Services net sales. For the year ended December 31, 2008 four customers each made up more than 10% of the Laboratory Services net sales and combined they represent 56% of the Laboratory Services net sales.

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 instruments and services, engaging existing and new technologies to create scientific and medical applications that will have significant commercial value. Major areas of focus include ultra-high sensitivity DNA mutation detection building in our WAVE and SURVEYOR products; a toolbox of mitochondrial DNA assays to assess damage, copy number, deletion and mutation for applications ranging from toxicology to diabetes to aging; clinical development of in-licensed diagnostics in neurodegenerative diseases, including Alzheimer s and Parkinson s diseases; and development of oncology mutation kits using WAVE/SURVEYOR for selection of anti-cancer therapies.

For the years ended December 31, 2009 and 2008, our research and development expenses were $3.2 million and $2.5 million, respectively.

Manufacturing

We manufacture bioconsumable products including our separation columns, liquid reagents, and enzymes. The major components of our WAVE Systems are manufactured for us by a third party. We integrate our own hardware and software with these third party manufactured components. Our manufacturing facilities for our WAVE Systems and bioconsumables are located in Omaha, Nebraska and San Jose, California.

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Intellectual Property

To establish and protect our proprietary technologies and products, we rely on a combination of patent, copyright, trademark and trade-secret laws, as well as confidentiality provisions in our contracts. Our WAVE System and related consumables are protected by patents and in-licensed technologies that expire in various periods beginning in 2013 through 2027. We will continue to file patent applications and seek new licenses as warranted to protect and develop new technologies of interest to our customer base in the coming years.

Competition

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

Competition for our WAVE Systems arises primarily from DNA sequencing and genotyping technologies. Competitors in these areas include Applied Biosystems, Idaho Technologies, Roche, Sequenom, and others. Competition for some of our non-WAVE consumable products comes from numerous well-diversified life sciences reagents providers, including, among others, Invitrogen, Qiagen, Roche, Stratagene, and Promega. Our Laboratory Services division faces competition from a number of companies offering contract DNA sequencing and other genomic analysis services, including Genzyme, Clinical Data, SeqWright and others. In addition, several clinical diagnostics service providers, such as Labcorp, Quest, Athena and Baylor College of Medicine, also offer related laboratory services. Finally, additional competition arises from academic core laboratory facilities.

Employees

As of December 31, 2009 and 2008, we had employees focused in the following areas of our operation:

	December 31,	
	2009	2008
Manufacturing and Laboratory	36	42
Sales, Marketing and Administration	53	65
Research and Development	14	12
	103	119

Our employees were employed in the following geographical locations:

	December 31,	
	2009	2008
United States	78	89
Europe (other than the United Kingdom)	12	13
United Kingdom	13	17
	103	119

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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 offices our administrative staff and laboratories. We maintain manufacturing facilities in Omaha, Nebraska and San Jose, California. We maintain research and development offices in Gaithersburg, Maryland and Omaha, Nebraska.

We make reports filed by us with the SEC available free of charge on our website as soon as reasonably practicable after these reports are filed. The address of our website is www.transgenomic.com. Information on our website, including any SEC report, is not part of this Annual Report on Form 10-K.

Item 1A. Risk Factors

We may not have adequate financial resources to execute our business plan.

We have historically operated at a loss and have not consistently generated sufficient cash from operating activities to cover our operating and other cash expenses. While we have been able to historically finance our operating losses through borrowings or from the issuance of additional equity, we currently have no plans to borrow additional funds or to issue additional equity securities for this purpose. At December 31, 2009, we had cash and cash equivalents of $5.6 million. While we believe that existing sources of liquidity are sufficient to meet expected cash needs through 2010, we will need to increase our net sales or further reduce our operating expenses in order to be assured of meeting our liquidity needs on a long-term basis. However, we cannot assure you that we will be able to increase our net sales, further reduce our expenses, or raise further capital or equity and, accordingly, we may not have sufficient sources of liquidity to continue the operations of the Company indefinitely.

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 net loss for the year ended December 31, 2009 was $1.9 million. Our loss from continuing operations for the year ended December 31, 2008 was $0.5 million. These historical losses have been due principally to the high levels of research and development expenses and sales and marketing expenses that we have incurred in order to develop and market our products, the fixed nature of our manufacturing costs, restructuring charges and impairment charges. In addition, markets for our products and services have developed more slowly than expected in many cases and may continue to do so. As a result, we may incur operating losses in the future.

Market demand is outside of our control.

There are many factors that affect the market demand for our products and services that we cannot control. Demand for our WAVE System is affected by the needs and budgetary resources of research institutions, universities, hospitals and others who use the WAVE System for genetic-variation research. The WAVE System represents a significant expenditure by these types of customers and often requires a long sales cycle. Similarly, the sales cycle for the OEM equipment that we sell can also be lengthy. If net sales from the sales of our products and services continue at current levels, we may need to take steps to further reduce operating expenses or raise additional working capital. We cannot assure you that sales will increase or that we will be able to reduce operating expenses or raise additional working capital.

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The current economy may decrease sales.

Demand for our instruments is affected by the budgetary resources of institutions that use our products. Potential customers may be unable to obtain the financing that they need to make such significant capital expenditures during these troubled economic times. In addition, potential customers may be under budgetary restrictions which do not allow for such capital expenditures in the foreseeable future.

Sales of our Laboratory Services have been variable.

Laboratory Services include services performed by both our Molecular Clinical Reference Laboratory and our Pharmacogenomics Research Services. Testing volumes at the Molecular Clinical Reference Laboratory is dependent on patient visits to doctors offices and other providers of health care and tends to fluctuate on a seasonal basis. Volume of testing generally declines during the year end holiday periods, other major holidays and the summer. The Pharmacogenomics Research Services depends on project based work which will change from quarter to quarter. Therefore, comparison of the results of successive quarters may not accurately reflect trends or results for the full year.

Our Laboratory requires ongoing CLIA certification.

The Clinical Laboratory Improvement Amendments of 1988 (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. CLIA requires that all clinical laboratories meet quality assurance, quality control and personnel standards. Laboratories also must undergo proficiency testing and are subject to inspections.

The sanctions for failure to comply with 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 protected health information and establish standards for electronic healthcare transactions in the United States. These privacy regulations establish federal standards regarding the uses and disclosures of protected health information. Our Molecular Clinical Reference Laboratory is 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 healthcare programs and the loss of various licenses, certificates and authorizations necessary to operate our Laboratory Services business. We could also incur liabilities from third party claims.

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Our business could be adversely impacted by healthcare reform.

Government attention to the healthcare industry in the United States is significant and may increase. There has been extensive public discussion on healthcare reform. While it is not possible to predict what changes in U.S. government regulation of healthcare will occur, or the nature or impact of any such change, our business could be adversely impacted by these changes.

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 approximately 60% 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 since our foreign sales are typically paid for in British Pounds or the Euro;
- 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 to our ability to sell products and services profitably in these markets; and
- the fluctuation of foreign currency to the US 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 WAVE System includes hardware components and instrumentation manufactured by a single supplier and if we are no longer able to obtain these components and instrumentation our ability to manufacture our products could be impaired.

We rely on a single supplier, Hitachi High Technologies America, to provide the basic instrument modules used in our WAVE Systems. While other suppliers of instrumentation are available, we believe that our arrangement with Hitachi offers strategic advantages. We have successfully converted the latest model of WAVE Systems to utilize Hitachi s newest instrument line. If we were required to seek alternative sources of supply, it could be more time consuming or expensive or require significant and costly modification of our WAVE System. Also, if we were unable to obtain instruments from Hitachi in sufficient quantities or in a timely manner, our ability to manufacture our products could be impaired, which could limit our future net sales.

The current economy may cause suppliers of products to not be able to perform.

We rely on various suppliers for products and materials needed to produce our products. In the event that they would be unable to deliver those items due to product shortage or business closure, we would be unable to deliver our products or may need to increase our prices. The current economy poses additional risk of our suppliers ability to continue their businesses as usual.

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We may not have adequate top executive talent to execute our business plan.

In order to reduce our operating costs, we have reduced the number of employees in most areas of our business. In addition, we may lose key management, scientific, technical, sales and manufacturing personnel from time to time. It may be very difficult to recruit and retain executive management if they are needed in the future, and the loss of top executive talent could harm our business and operating results. We cannot assure you that our employee reductions will not impair our ability to continue to develop new products and refine existing products in order to remain competitive. In addition, these reductions could prevent us from successfully marketing our products and developing our customer base.

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 that 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 secret protection, copyright and trademark laws, non-disclosure agreements and other contractual provisions for some of our confidential and proprietary information that is not subject matter for which patent protection is being sought. 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 our 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 technology, 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

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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. The 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 efforts. Finally, some of our patent protection in the U.S. is 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, any application or exploitation of our technology could infringe patents or proprietary rights of others and any licenses that we might need as a result of such infringement might not be available to us on commercially reasonable terms, if at all. This may lead others to assert patent infringement or other intellectual property claims against us.

Our failure to comply with any applicable government 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 assure you 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.

The price for our common stock is volatile and may drop.

The trading price for our common stock has fluctuated significantly over recent years. The volatility in the price of our stock is attributable to a number of factors, not all of which relate to our operating results and financial position. Our stock is traded on the OTC Bulletin Board (OTCBB). Continued volatility in the market price for our stock should be expected and we cannot assure you that the price of our stock will not decrease in the future. Fluctuations or further declines in the price of our stock may affect our ability to sell shares of our stock and to raise capital through future equity financing.

Our stock has been delisted from the Nasdaq Capital Market and is now trading on the OTC Bulletin Board (OTCBB).

On February 1, 2007, we received a staff determination letter from Nasdaq s Listing Qualifications Department indicating that we no longer met the minimum bid price requirement for continued listing on the Nasdaq Capital Market. As a result, our common stock on the Nasdaq Capital

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Market was ended on February 22, 2007. Trading information about our common stock became available on the OTC Bulletin Board beginning on February 26, 2007.

Our common stock is deemed to be penny stock , which may make it more difficult for investors to sell their shares due to suitability requirements.

Our common stock is classified as a penny stock under the rules of the SEC. The Securities and Exchange Commission has adopted Rule 3a51-1 which establishes the definition of a penny stock , for the purposes relevant to us, as any equity security that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, Rule 15g-9 requires:

- that a broker or dealer approve a person s account for transactions in penny stocks; and
- that the broker or dealer receives from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person s account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the SEC relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the penny stock rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

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, 2009, we had obligations to issue 11,309,887 shares of common stock upon exercise of outstanding stock options representing 3,331,731 shares and warrants representing

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7,978,156 shares. The issuance of these additional shares of common stock may be dilutive to our current shareholders 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, 2009, we had 49,189,672 shares of common stock outstanding. Fewer than ten unrelated, institutional holders own more than 50% of these shares. The sale of significant shares into the public market has 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. Such an event could place further downward pressure on the price of our common 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 stock in the market.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

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

Location	Function	Square Footage	2010 Scheduled Rent	Lease Term Expires
Omaha, Nebraska	WAVE and Consumable Manufacturing	25,000	$ 138	July 2011
San Jose, California	Consumable Manufacturing	14,360	$ 165	October 2010
Glasgow, Scotland	Multi Functional [(1)]	5,059	$ 33	March 2012
Omaha, Nebraska	Multi Functional [(1)]	18,265	$ 196	July 2012
Paris, France	Multi Functional [(1)]	4,753	$ 102	February 2011[(2)]
Gaithersburg, Maryland	Multi Functional [(1)]	8,404	$ 154	May 2012

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

(2) This lease expiration assumes that we exercise the early termination clause which allows the lease to terminate in February 2011. The original lease expiration is February 2014.

We occupy the leased facilities, with the exception of the Paris, France facility which we have vacated and are in the process of finding a tenant to sublease this facility. In the event we are unable to sublease the Paris, France facility, we will exercise the early termination clause which allows for the lease to terminate in February 2011. The original term of the lease expires on February 1, 2014. We have a reserve of $0.1 million in other accrued expenses for the remaining lease liability.

We believe that our facilities are suitable and adequate for our current level of operations.

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Item 3. Legal Proceedings.

The Company is not a party to any pending legal proceedings which, if decided adversely to the Company, will have a material adverse effect on our financial position, results of operations or cash flows.

Item 4. Submission of Matters to a Vote of Security Holders.

We did not submit any matters to our stockholders for a vote or other approval during the fourth quarter of the fiscal year covered by this report.

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PART II

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

Market Information. Share price information for our common stock is available on the OTC Bulletin Board under the symbol TBIO.OB. Prior to February 22, 2007, our common stock was listed for trading on the Nasdaq Capital Market 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 2008 and 2009.

	High	Low
Year Ended December 31, 2008		
First Quarter	$ 0.54	$ 0.42
Second Quarter	$ 0.86	$ 0.47
Third Quarter	$ 0.85	$ 0.52
Fourth Quarter	$ 0.56	$ 0.25
Year Ended December 31, 2009		
First Quarter	$ 0.42	$ 0.21
Second Quarter	$ 0.58	$ 0.32
Third Quarter	$ 0.70	$ 0.35
Fourth Quarter	$ 0.74	$ 0.58

Holders. At December 31, 2009, there are 49,189,672 shares of our common stock outstanding and approximately 2,800 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. We expect to retain all earnings, if any, for investment in our business. Dividends on our common stock will be paid only if and when declared by our Board of Directors. The Board s ability to declare a dividend is subject to limits imposed by Delaware corporate law. 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.

Sale of Unregistered Securities. The Company made no sales of its common stock during the years ended December 31, 2009 and 2008 that were not registered under the Securities Act of 1933 (the Securities Act). Information regarding sales of equity securities by the Company during the year ended December 31, 2005 that were not registered under the Securities Act of 1933 have been previously reported by the Company on Form 8-Ks filed on March 18, 2005, March 30, 2005 and October 31, 2005.

Issuer Purchase of Equity Securities. The Company made no purchases of its common stock during the quarter ended December 31, 2008. Therefore, tabular disclosure is not presented.

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Item 6. Selected Consolidated Financial Data.

The selected consolidated balance sheet data as of December 31, 2009 and 2008 and the selected consolidated statements of operations data for each year ended December 31, 2009 and 2008 have been derived from our audited consolidated financial statements that are included elsewhere in this Annual Report on Form 10-K. The selected consolidated balance sheet data as of December 31, 2007, 2006 and 2005 and the selected consolidated statements of operations data for each year ended December 31, 2007, 2006 and 2005 have been derived from our audited consolidated financial statements that are not included in this Annual Report on Form 10-K. Dollar amounts, except per share data, are presented in thousands.

	Year Ended December 31,				
	2009	2008	2007	2006	2005
Statement of Operations Data:					
Net sales	$ 22,023	$ 23,993	$ 23,176	$ 23,415	$ 25,828
Cost of good sold	10,418	10,345	10,483	12,046	13,497
Gross profit	11,605	13,648	12,693	11,369	12,331
Selling, general and administrative	10,319	10,795	11,466	12,138	12,218
Research and development	3,182	2,465	3,033	2,362	2,199
Restructuring charges [1]		118	1,516		
Impairment charges [2]		638			425
Operating expenses	13,501	14,016	16,015	14,500	14,842
Other income (expense) [3]	18	86	1,391	198	(2,447)
Loss before income taxes	(1,878)	(282)	(1,931)	(2,933)	(4,958)
Income tax expense	42	213	243	30	26
Loss from continuing operations	(1,920)	(495)	(2,174)	(2,963)	(4,984)
Income (Loss) from discontinued operations, net of tax [4]			67	(468)	(10,009)
Net Loss	$ (1,920)	$ (495)	$ (2,107)	$ (3,431)	$ (14,993)
Basic and diluted Loss per share: [4]					
From continuing operations	$ (0.04)	$ (0.01)	$ (0.04)	$ (0.06)	$ (0.14)
From discontinued operations [4]				(0.01)	(0.28)
	$ (0.04)	$ (0.01)	$ (0.04)	$ (0.07)	$ (0.42)
Basic and diluted weighted average shares outstanding	49,190	49,190	49,190	49,188	35,688

	As of December 31,				
	2009	2008	2007	2006	2005
Balance Sheet Data:					
Total assets	$ 16,004	$ 17,556	$ 19,090	$ 21,367	$ 25,340
Total stockholders equity	11,662	13,205	14,102	16,038	17,906

(1) Restructuring plans were implemented in 2008 and 2007 to reduce and align our expenses with current business prospects. The plans included employee terminations, office closures, termination of collaborations and write-offs of abandoned intellectual property. As a result, restructuring charges were recorded and are included in operating expenses. Refer to Note C to the accompanying consolidated financial statements.

(2) Impairment charges in 2008 relate to the impairment of goodwill. Impairment charges in 2005 relate to the impairment of patent pursuits and write-down of inventory to net realizable value.

(3) Other income (expense) for all years presented primarily includes interest expense and interest income. Other income in 2007 includes $.9 million from the sale of an investment security and $.2 million in insurance proceeds related to equipment destroyed in fire at our Cramlington, England facility. The loss on debt extinguishment of $0.5 million in 2005 related to the repayment of long-term debt and $2.9 million resulting from certain modifications to long-term borrowing agreements that were treated as extinguishments for financial reporting purposes.

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(4) During 2005, we decided to exit our Nucleic Acids operating segment and, as a result, we recorded impairment and exit charges of $8.8 million consisting of valuation adjustments to reflect the carrying value of related net assets at estimated fair market value. The results of this business segment are shown as discontinued operations for all periods presented.

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

This report, including Management s Discussion & Analysis, 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, Medicare/Medicaid/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, industry conditions, our ability to execute our operating plans, the success of our cost savings initiatives, competitive environment and related market conditions, actions of governments and regulatory factors affecting our business and other risks as described in our reports filed with the Securities and Exchange Commission. 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, should, will, would and 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 the forward-looking statements that we make for a number of reasons including those described in Item 1A, Risk Factors, and other factors identified by cautionary language used elsewhere in this 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.

Our continuing operations consist of the Instrument Related Business (including the manufacture and sale of our WAVE System and related consumable products) and the Laboratory Services (see the description of our business in Item 1). We have broken out our business into two reportable segments: Instrument Related business and Laboratory Services business. There are estimates involved in breaking out the expenses and other disclosures.

The following discussion should be read together with our financial statements and related notes contained in this report. Results for the year ended December 31, 2009 are not necessarily indicative of results that may be attained in the future.

Executive Summary

2009 Results

Full year net sales for 2009 of $22.0 million decreased by 8% compared with total net sales for 2008 of $24.0 million. The Instrument Related Business decreased 12% from 2008 to 2009. The

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growth in our Laboratory Services was 7% over the prior year. Overall gross margins decreased from 57% to 53%. Operating expenses in 2008, exclusive of $1.0 million in foreign currency revaluation gains, a goodwill impairment write-off of $0.6 million, and $0.1 million of restructuring charges, were $14.3 million as compared to $13.2 million in 2009, exclusive of $0.3 million of revaluation losses. General and administrative costs, exclusive of foreign currency revaluation, are down by approximately $0.5 million, research and development costs are up by $0.7 million and sales and marketing costs are down by $1.3 million.

We have taken significant steps to reduce our operating expenses. We generated a positive cash flow during the year largely due to inventory management and accounts receivable collection.

2010 Outlook

We continue to leverage our core instrument business for on-going instrument sales worldwide as well as employing our instruments and related expertise in our two laboratory services businesses. Challenges do exist for WAVE System and consumable sales growth in our traditional markets. We continue to look for emerging markets and novel applications to provide us with new opportunities for our WAVE System such as our newly launched KRAS mutation detection kit. We intend to continue to look for opportunities to diversify into new markets, including the personalized medicine market (particularly in oncology), where the sensitivities of our technologies are essential. In addition, we are also selling refurbished WAVE Systems in order to allow an opportunity for customers that may not be able to afford the cost of a new system. Additionally, we have developed credibility and momentum with third-party platforms that will allow us to leverage on our direct sales force and distribution network.

On the Laboratory Services front, we have completed cancer pathway gene mutation projects for a number of high visibility pharmaceutical companies which have continued to demonstrate the unique sensitivity of detecting DNA mutations in cancer genes which are central to effective therapy selection for current and future cancer therapeutics. To this end, we are now gaining clinical trial program contracts which we believe will more rapidly impact our revenue opportunities from this segment. To compliment our mutation detection expertise, we also have strengthened our capabilities in biomarker development and mutation detection in novel cancer pathway genes which will aid in the development of true personalized medicine for our pharmaceutical partners. We recently licensed and are developing a new technology for even greater DNA mutation enrichment and detection sensitivity which should prove to be the highest sensitivity technology in the market. In our Molecular Clinical Reference Laboratory we have continued to seek out or develop new tests to further expand our menu and growth opportunities for this business.

Although we have experienced declining sales and recurring net losses (resulting in an accumulated deficit of $130.2 million at December 31, 2009), management believes existing sources of liquidity, including cash and cash equivalents of $5.6 million, are sufficient to meet expected cash needs during 2010. We will need to increase net sales in order to meet our liquidity needs on a long-term basis. In future periods, there is no assurance that we will be able to increase net sales or further reduce expenses and, accordingly, we may not have sufficient sources of liquidity to continue operations indefinitely. The current economic conditions may have a negative impact on our net sales in 2010. The tightening of the credit market may make it difficult for customers to purchase instruments due to lack of funding. This was certainly true in 2009. In the event we do not have net sales growth, we expect to make cost reductions to align our expenses with our net sales.

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Results of Continuing Operations

Years Ended December 31, 2009 and 2008

Net Sales. Net sales for the years ended December 31, 2009 and 2008 consisted of the following (dollars in thousands):

	2009	2008	Change $	Change %
Instrument Related Business:				
Bioinstruments	$ 10,175	$ 11,195	$ (1,020)	(9)%
Bioconsumables	7,282	8,549	(1,267)	(15)%
	17,457	19,744	(2,287)	(12)%
Laboratory Services:				
Molecular Clinical Reference Laboratory Services	3,541	2,870	671	23%
Pharmacogenomics Research Services	1,025	1,379	(354)	(26)%
	4,566	4,249	317	7%
Total Net Sales	$ 22,023	$ 23,993	$ (1,970)	(8)%

Bioinstrument sales consist of sales of our WAVE System and associated equipment that we manufacture or assemble, net sales from service contracts that we enter into with purchasers of our instruments, as well as sales of instruments we distribute for other manufacturers (OEM equipment). We also sell refurbished WAVE Systems in order to access customers that may not be able to afford new systems. Bioinstrument net sales are down $1.0 million, or 9% during the year ended December 31, 2009 as compared to the same period in 2008. We sold 32 WAVE Systems during the year ended December 31, 2009 compared to 30 systems during 2008. This increase resulted from higher demand in the Asia markets which is offset by our average sales price decreasing 30% from 2008 to 2009. This decrease in average sales price is largely due to the geographic makeup of the sales. We sold 11 OEM instruments during the year ended December 31, 2009 compared to 13 in the same period of 2008 with a 6% increase in the average sales price. There was a reduction in service contract net sales in the European market largely due to foreign currency exchange impact of $0.5 million. Service contract revenue decreased in the United States due to fewer service contract renewals. Demand for WAVE Systems continues to be affected by significant competitive challenges from traditional (i.e. sequencing) and evolving technologies. Instrument related revenue is subject to many factors such as type of instrument sold and the country of sale. Due to these factors each period should be considered on a stand alone basis and is not indicative of future net sales streams.

Bioconsumable net sales decreased during the year ended December 31, 2009 compared to 2008 by $1.3 million. The primary decrease in consumables is due to the negative impact of the foreign currency exchange rates, primarily the Great British Pound to the US Dollar and a smaller usage decline of the WAVE consumables. The foreign currency exchange impact included in this decrease was $0.8 million.

Laboratory Services net sales increased during the year ended December 31, 2009 compared to 2008 by $0.3 million or 7%. Laboratory Services sales includes both the Molecular Clinical Reference Laboratory Services and the Pharmacogenomics Research Services. The Molecular Clinical Reference

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Laboratory Services net sales of $3.5 million increased 23% over the year ended December 31, 2008. The Molecular Clinical Reference Laboratory net sales has increased due to increased test volume. Our test volume has increased by 45% due to our increased sales focus. The average revenue per test has decreased by 15% due to the mix of tests performed and increased Medicare and Medicaid test volumes which drives lower reimbursements for these tests. The Pharmacogenomics Research Services net sales of $1.0 million during 2009 decreased 26% over the year ended December 31, 2008. Pharmacogenomics Research revenue was lower during 2009 than in 2008 due to fewer large projects completed in 2009. The Pharmacogenomics Research Services net sales have peaks due to the nature of project related business. Each period for Pharmacogenomics Research Services should be considered on a stand alone basis and is not indicative of future net sales.

Costs of Goods Sold. Costs of goods sold include material costs for the products that we sell and substantially all other costs associated with our manufacturing facilities (primarily personnel costs, rent and depreciation) as well as the wholesale price we pay manufacturers of OEM Equipment that we distribute. It also includes direct costs (primarily personnel costs, test outsourcing fees, rent, supplies and depreciation) associated with our Laboratory Services operations. Cost of goods sold for the years ended December 31, 2009 and 2008 consisted of the following (dollars in thousands):

			Change	
	2009	**2008**	**$**	**%**
Instrument Related Business:				
Bioinstruments	$ 3,801	$ 4,046	$ (245)	(6)%
Bioconsumables	3,779	3,982	(203)	(5)%
	7,580	8,028	(448)	(6)%
Laboratory Services:				
Molecular Clinical Reference Laboratory Services	2,018	1,647	371	23%
Pharmacogenomics Research Services	820	670	150	22%
	2,838	2,317	521	22%
Total Cost of Goods Sold	$ 10,418	$ 10,345	$ 73	1%

Gross profit equaled $11.6 million or 53% of total net sales during the year ended December 31, 2009 compared to $13.6 million or 57% during the same period of 2008. The decrease in gross profit as a percent of net sales is largely attributable to changes in the composition of products sold. Margins on bioinstruments declined from 64% to 63% from 2008 to 2009 due to the change in the geographic mix of instruments sold, a decline in service contract revenue and obsolescence of $0.1 million related to an older low throughput instrument. Margins on bioconsumables decreased from 53% in 2008 to 48% in 2009 primarily related to an obsolescence reserve of $0.4 million for control plasmids used in our SURVEYOR kits and the transition from a steel syringe delivery method to a disposable delivery method. The Laboratory Services business segment margins decreased for the year ended December 31, 2009 to 38% as compared to 45% for the year ended December 31, 2008. The margin decline in the Laboratory Services business segment is driven by the decrease in Pharmacogenomics Research Services revenue. In addition, Laboratory Services had higher operating supplies cost in 2009 than the same period in 2008 related to the higher volume of tests and work required on the Pharmacogenomic projects.

Selling, General and Administrative Expenses. Selling, general and administrative expenses primarily include personnel costs, marketing, travel and entertainment costs, professional fees, facility

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costs and foreign currency revaluation. Selling, general and administrative expenses, excluding foreign currency revaluation gains and losses, decreased as a percentage of net sales from 49% in 2008 to 46% in 2009. SG&A would have been $10.0 million excluding the foreign currency revaluation expense of $0.3 million for the year ended December 31, 2009. SG&A would have been $11.8 million excluding the $1.0 million foreign currency revaluation gain for the year ended December 31, 2008. These reductions were primarily due to open employment positions not being filled and lower commissions, travel and stock option expenses.

Research and Development Expenses. Research and development expenses primarily include personnel costs, collaboration costs, legal fees, supplies, and facility costs. These costs totaled $3.2 million during the year ended December 31, 2009 compared to $2.5 million during the same period of 2008, an increase of $0.7 million or 29%. The increase is primarily due to collaboration expenses with Power3 for their NuroPro assay development related to the diagnosis of Alzheimer s and Parkinson s diseases, the Dana-Farber Cancer Institute related to the development of high sensitivity mutation detection technology called Cold-PCR and purchases of samples related to research work in progress. As a percentage of net sales, research and development expenses totaled 14% and 10% of net sales during the year ended December 31, 2009 and 2008 respectively. Research and development expenses are expensed in the year in which they are incurred.

Restructuring Charges. There were no restructuring charges in 2009. We recorded restructuring charges of $0.1 million in 2008 related to the additional lease expense on the shut down of the Paris facility. This is due to changes in the market place causing our inability to sublease the facility of $0.3 million, which is offset by reserves for fixed assets and severance of $0.2 million not utilized. In addition, we took restructuring charges of less than $0.1 million in 2008 related to severance due to the relocation of the Pharmacogenomics Laboratory from Gaithersburg, Maryland to Omaha, Nebraska.

Goodwill. As part of our 2008 impairment assessment we determined that goodwill was impaired and, accordingly, it was written off. The goodwill was attached to the WAVE related business. See goodwill discussion in Footnote B.

Other Income (Expense). Other income consists primarily of interest income from cash and cash equivalents invested in overnight instruments. Other income for the years ended December 31, 2009 and 2008 was less than $0.1 million for each period.

Income Tax Expense. Income tax expense recorded during the years ended December 31, 2009 and 2008 related to income taxes in states, foreign countries and other local jurisdictions and totaled less than $0.1 million and $0.2 million, respectively. The 2009 income tax expense is partially offset by a refundable tax credit related to the 2008 federal and state income tax returns. This credit is anticipated to continue for 2009. The effective tax rate for the year ended December 31, 2009 is 2.3%, which is primarily the result of valuation allowances against net operating losses for the United States.

A net deferred tax liability was recorded during 2009 relating to the UK income taxes of less than $0.1 million compared to a net deferred tax asset of $0.1 million at year end 2008. Due to our cumulative losses and inability to utilize any additional losses as carrybacks, we did not provide for an income tax benefit during the year ended December 31, 2009 based on our determination that it was more likely than not that such benefits would not be realized. We will 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

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required, the tax benefit of the remaining deferred tax assets will be recognized at such time. Our net operating loss carryforwards from continuing and discontinued operations of $107.2 million will expire at various dates from 2010 through 2029, if not utilized. We also had state income tax loss carryforwards from continuing and discontinued operations of $41.0 million at December 31, 2009. We plan to do a study related to our federal and state net operating loss carryforwards in 2010 to determine if these have been limited due to change of control provisions. These carryforwards will also expire at various dates if not utilized.

Liquidity and Capital Resources

Our working capital positions at December 31, 2009 and 2008 were as follows (in thousands):

	December 31,		
	2009	**2008**	**Change**
Current assets (including cash and cash equivalents of $5,642 and $4,771, respectively)	$ 14,454	$ 15,585	$ (1,131)
Current liabilities	4,103	4,235	(132)
Working capital	$ 10,351	$ 11,350	$ (999)

While we did generate cash in 2009, we have historically operated at a loss and have not consistently generated sufficient cash from operating activities to cover our operating and other cash expenses. In 2009 we had a net loss of $1.9 million and needed to use $0.4 million in investing activities which was offset by cash provided by operating activities. While we have been able to historically finance our operating losses through borrowings or from the issuance of additional equity, we currently have no borrowings and have no plans to issue additional equity securities for this purpose. At December 31, 2009 and December 31, 2008, we had cash and cash equivalents of $5.6 and $4.8 million, respectively. While we believe that existing sources of liquidity are sufficient to meet expected cash needs during 2010, we will need to increase our net sales, focus on receivables and inventory management or further reduce our operating expenses in order to be assured of meeting our liquidity needs on a long-term basis. However, we cannot assure you that we will be able to increase our net sales or further reduce our expenses, or raise further capital or equity and, accordingly, we may not have sufficient sources of liquidity to continue our operations indefinitely.

Analysis of Cash Flows

Years Ended December 31, 2009 and 2008

Net Change in Cash and Cash Equivalents. Cash and cash equivalents increased $0.9 million during the year ended December 31, 2009 primarily as a result of $1.3 million being provided by operating activities and net cash used in investing activities of $0.4 million. Cash and cash equivalents decreased $1.0 million during the year ended December 31, 2008 as a result of net cash of $0.4 million being used by operating activities, changes in foreign currency exchange rates of $0.1 million and net cash used in investing activities of $0.4 million.

Cash Flows Provided In Operating Activities. Cash flows provided in operating activities totaled $1.3 million during the year ended December 31, 2009 compared to $0.4 million used in operating activities during the year ended December 31, 2008. We were able to generate cash flows from operating activities in 2009 due to our focus on accounts receivable collections and strong

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inventory management. The cash flows provided by operating activities in 2009 primarily relate to the increased accounts receivable collections of $1.1 million, the decrease in inventory of $1.3 million and noncash items of $1.1 million, offset by the loss of $1.9 million and lower accrued expenses of $0.4 million. The use in 2008 resulted from an increase in accounts receivable of $1.1 million and higher inventory levels of $0.7 million related primarily to the acquisition of OEM Equipment and a net loss of $0.5 million offset somewhat by non-cash charges of $1.9 million. Non-cash charges consisted of depreciation and amortization of $0.9 million, goodwill impairment of $0.6 million and non-cash stock based compensation of $0.4 million.

Cash Flows Used In Investing Activities. Cash flows used in investing activities totaled $0.4 million during the years ended December 31, 2009 and 2008. Cash flows used in investing activities in 2009 and 2008 consisted primarily of purchases of property and equipment.

Off Balance Sheet Arrangements

At December 31, 2009 and 2008, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

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 they require significant or complex judgments on the part of 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 judgment or estimates may vary under different assumptions or circumstances. The following are certain critical accounting policies that may involve the use of judgment or estimates.

Allowance for Doubtful Account. Accounts receivable are shown net of an allowance for doubtful accounts. In determining an allowance for doubtful accounts, we consider the age of the accounts receivable, customer credit history, customer financial information, reasons for non-payment, and our knowledge of the customer. If our customers financial condition were to deteriorate, resulting in a change in their ability to make payment, additional allowances may be required.

Inventories. Inventories are stated at the lower of cost or market net of allowance for obsolete 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.

Depreciation and Amortization of Long-Lived Assets. Our long-lived assets consist primarily of property and equipment, patents and intellectual property. We believe the useful lives we assigned to these assets are reasonable. If our assumptions about these assets change as a result of events or circumstances and we believe the assets may have declined in value we may record impairment

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charges resulting in an increase to operating expenses. Property and equipment are carried at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets ranging from 1 to 10 years. We capitalize legal costs and filing fees associated with obtaining patents on our 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. Intellectual property is recorded at cost and is amortized over its estimated useful life.

Impairment of Long-Lived Assets. We evaluate goodwill for impairment on an annual basis. We assess the recoverability of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. As part of our 2008 impairment assessment, we determined that goodwill was impaired, and accordingly, it was written off.

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.

Net sales of our instrument and bioconsumable products 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. Our normal sales terms do not provide for the right of return unless the product is damaged or defective. Net Sales from certain services associated with our 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 period and net sales associated with these contracts are deferred and ratably recognized over the service period.

Net sales recognition for our Molecular Clinical Reference Laboratory is on an individual test basis and takes place when the test report is completed, reviewed and sent to the client less the reserve for insurance, Medicare and Medicaid expected reimbursement. Adjustments to the allowances, based on actual receipts from the third party payers, are recorded upon settlement.

In our Pharmacogenomics research group we perform services on a project by project basis. When we get payment in advance we recognize revenue when we deliver the service. These projects typically do not extend beyond one year.

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.

Recently Issued Accounting Pronouncements

In June 2009, the FASB issued FASB ASC 105, Generally Accepted Accounting Principles, which establishes the FASB Accounting Standards Codification as the sole source of authoritative

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generally accepted accounting principles. Pursuant to the provisions of FASB ASC 105, the Company has updated references to GAAP in its financial statements issued for the period ended September 30, 2009. The adoption of FASB ASC 105 did not impact the Company s financial position or results of operations.

ASC 820, Fair Value Measurement and Disclosures defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. We have adopted ASC 820 with no impact on our financial statements.

ASC 350, Intangibles Goodwill and Other requires companies estimating the useful life of a recognized intangible asset to consider their historical experience in renewing or extending similar arrangements or, in the absence of historical experience, to consider assumptions that market participants would use about renewal or extension. ASC 350 was adopted on January 1, 2009 and had no impact on our financial statements.

ASC 815-40, Derivatives and Hedging addresses freestanding contracts that are indexed to, and potentially settled in, an entity s own stock. We adopted ASC 815-40 on January 1, 2009. We have assessed our warrants and determined the fair value is $0 so there is no impact to our financial statements.

Accounting Standards Update No. 2009-13 addresses the accounting for multiple deliverable arrangements to enable vendors to account for products or services (deliverables) separately rather than as a combined unit. This update is effective for fiscal years on or after June 15, 2010. We are currently assessing the impact to our financial statements.

Accounting Standards Update No. 2009-05 provides amendments to ASC Topic 820, Fair Value Measurements and Disclosure for the fair value measurement of liabilities. We have implemented ASU 2009-05 with no impact on our financial statements.

Accounting Standards Update No. 2009-14 addresses the accounting for revenue arrangements that contain tangible products and software. This update is effective for fiscal years beginning on or after June 15, 2010. We are currently assessing the impact to our 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 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. Actual results could differ from the estimates and assumptions used in preparing these financial statements.

This report, including Management s Discussion & Analysis, 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

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things: our expected revenue, income(loss), receivables, operating expenses, supplier pricing, availability and prices of raw materials, Medicare/Medicaid/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, industry conditions, our ability to execute our operating plans, the success of our cost savings initiatives, competitive environment and related market conditions, actions of governments and regulatory factors affecting our business and other risks as described in our reports filed with the Securities and Exchange Commission. In some cases these statements are identifiable through the use of words such as anticipate , believe , estimate , expect , intend , project , target , can , could , may , should , will , would and 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 the forward-looking statements that we make for a number of reasons including those described in Part I, Item 1A, Risk Factors , of this 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.

Impact of Inflation

We do not believe that price inflation or deflation had a material adverse effect on our financial condition or results of operations during the periods presented.

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

Foreign Currency Translation Risk. During the last two fiscal years, our international sales have represented more than 60% of our net sales. These sales of products in foreign countries are mainly completed in either British Pounds Sterling or the Euro. Additionally, the British Pound is the functional currency of our wholly owned subsidiary, Transgenomic Limited. Results of operation and the Balance Sheet are translated from the functional currency of the subsidiary, Great British Pounds, to our reporting currency of the US Dollar. Results of operations for the Company s foreign subsidiaries are translated using the average exchange rate during the period. Assets and liabilities are translated at the exchange rate in effect at the balance sheet date. In addition, we have revaluation risk which occurs when the transaction is done in a currency other than the British Pound. This transaction must be revalued within the Transgenomic Limited ledger, whose functional currency is the British Pound Sterling. The majority of the transactions on this ledger are in Euro. As a result we are subject to exchange rate risk. The foreign exchange rates have had large variances recently. At January 1, 2008 the Euro to Great British Pound exchange rate was .73650 as compared to December 31, 2009 rate of .9000. The Great British Pound to US Dollar exchange rate was 1.9970 at January 1, 2008 compared to 1.59280 at December 31, 2009. Such large changes in foreign exchange rates may negatively impact our business in 2010.

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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 as of December 31, 2009 and 2008, and the related consolidated statements of operations, stockholders equity, and cash flows for years then ended. 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Transgenomic, Inc. and subsidiary as of December 31, 2009 and 2008, and the results of its their operations and their cash flows for years then ended, in conformity with U.S. generally accepted accounting principles.

We were not engaged to examine management s assessment of the effectiveness of Transgenomic, Inc. s internal control over financial reporting as of December 31, 2009, included in the accompanying Management s Report on Internal Control Over Financial Reporting and, accordingly, we do not express an opinion thereon.

/s/ McGladrey & Pullen, LLP

Omaha, Nebraska
February 24, 2010

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

As of December 31, 2009 and 2008

(Dollars in thousands except per share data)

	2009	2008
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 5,642	$ 4,771
Accounts receivable (net of allowances for bad debts of $310 and $388, respectively)	4,522	5,385
Inventories (net of allowances for obsolescence of $507 and $108, respectively)	3,552	4,775
Prepaid expenses and other current assets	738	654
Total current assets	14,454	15,585
PROPERTY AND EQUIPMENT:		
Equipment	9,972	10,059
Furniture, fixtures and leasehold improvements	3,834	3,920
	13,806	13,979
Less: accumulated depreciation	(12,839)	(12,781)
	967	1,198
OTHER ASSETS:		
Other assets (net of accumulated amortization of $525 and $425, respectively)	583	773
	$ 16,004	$ 17,556
LIABILITIES AND STOCKHOLDERS EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 1,013	$ 905
Other accrued expenses	2,517	2,810
Accrued compensation	573	520
Total current liabilities	4,103	4,235
Other long term liabilities	239	116
Total liabilities	4,342	4,351
STOCKHOLDERS EQUITY:		
Preferred stock, $.01 par value, 15,000,000 shares authorized, none outstanding		
Common stock, $.01 par value, 100,000,000 shares authorized, 49,189,672 shares outstanding	497	497
Additional paid-in capital	139,703	139,501
Accumulated other comprehensive income	1,645	1,470
Accumulated deficit	(130,183)	(128,263)
Total stockholders equity	11,662	13,205
	$ 16,004	$ 17,556

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

Years Ended December 31, 2009 and 2008

(Dollars in thousands except per share data)

	2009	2008
NET SALES	$ 22,023	$ 23,993
COST OF GOODS SOLD	10,418	10,345
Gross profit	11,605	13,648
OPERATING EXPENSES:		
Selling, general and administrative	10,319	10,795
Research and development	3,182	2,465
Restructuring charges		118
Goodwill Impairment		638
	13,501	14,016
LOSS FROM OPERATIONS	(1,896)	(368)
OTHER INCOME:		
Interest income	15	74
Other, net	3	12
	18	86
LOSS BEFORE INCOME TAXES	(1,878)	(282)
INCOME TAX EXPENSE	42	213
NET LOSS	$ (1,920)	$ (495)
BASIC AND DILUTED LOSS PER SHARE	$ (0.04)	$ (0.01)
BASIC AND DILUTED WEIGHTED AVERAGE SHARES OUTSTANDING	49,189,672	49,189,672

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

Years Ended December 31, 2009 and 2008

(Dollars in thousands except share data)

	Common Stock					
	Outstanding Shares	Par Value	Additional Paid in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
Balance, January 1, 2008	49,189,672	$ 497	$ 139,099	$ (127,768)	$ 2,274	$ 14,102
Other comprehensive income (loss):						
Net loss				(495)	(495)	(495)
Foreign currency translation adjustment					(804)	(804)
Comprehensive loss					(1,299)	
Non-cash stock based compensation			402			402
Balance, December 31, 2008	49,189,672	$ 497	$ 139,501	$ (128,263)	$ 1,470	$ 13,205
Other comprehensive income (loss):						
Net loss				(1,920)	(1,920)	(1,920)
Foreign currency translation adjustment					175	175
Comprehensive loss					(1,745)	
Non-cash stock based compensation			202			202
Balance, December 31, 2009	49,189,672	$ 497	$ 139,703	$ (130,183)	$ 1,645	$ 11,662

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

Years Ended December 31, 2009 and 2008

(Dollars in thousands)

	2009	2008
CASH FLOWS PROVIDED BY (USED IN) OPERATING ACTIVITIES:		
Net loss	$ (1,920)	$ (495)
Adjustments to reconcile net loss to net cash flows provided by (used in) operating activities:		
Depreciation and amortization	855	882
Non-cash stock based compensation	202	402
(Gain)/loss on sale of fixed assets	(3)	2
Goodwill Impairment		638
Deferred income taxes	22	(169)
Changes in operating assets and liabilities:		
Accounts receivable	1,113	(1,114)
Inventories	1,290	(665)
Prepaid expenses and other current assets	(60)	(1)
Accounts payable	60	(212)
Accrued expenses and accrued compensation	(401)	304
Other long term liabilities	109	15
Net cash flows provided by (used) in operating activities	1,267	(413)
CASH FLOWS USED IN INVESTING ACTIVITIES:		
Purchase of property and equipment	(351)	(325)
Change in other assets	(26)	(74)
Net cash flows used in investing activities	(377)	(399)
EFFECT OF FOREIGN CURRENCY EXCHANGE RATE CHANGES ON CASH	(19)	(140)
NET CHANGE IN CASH AND CASH EQUIVALENTS	871	(952)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	4,771	5,723
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 5,642	$ 4,771
SUPPLEMENTAL CASH FLOW INFORMATION		
Cash paid during the year for:		
Interest	$	$
Income taxes	163	71

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Years Ended December 31, 2009 and 2008

A. BUSINESS DESCRIPTION

Business Description.

Transgenomic, Inc. provides innovative products for the purification and analysis of nucleic acids used in the life sciences industry for research focused on molecular genetics and diagnostics. We also provide genetic variation analytical services to the medical research, clinical and pharmaceutical markets. Net sales are categorized as Instrument Related Business and Laboratory Services.

Instrument Related Business:

- Bioinstruments. Our flagship product is the WAVE® System which has broad applicability to genetic variation detection in both molecular genetic research and molecular diagnostics. There is a worldwide installed base of over 1,475 WAVE Systems as of December 31, 2009. We also distribute bioinstruments produced by other manufacturers (OEM Equipment) through our sales and distribution network. Service contracts to maintain installed systems are sold and supported by technical support personnel.

- Bioconsumables. The installed WAVE base and some third-party installed platforms generate a demand for consumables that are required for the continued operation of the bioinstruments. We develop, manufacture and sell these consumable products. In addition, we manufacture and sell consumable products that can be used on multiple, independent platforms. These products include SURVEYOR® Nuclease and a range of HPLC separation columns.

Laboratory Services:

- Molecular Clinical Reference Laboratory. The molecular clinical reference laboratory specializes in mitochondrial and molecular diagnostic testing including genetic testing for oncology, hematology and inherited disorders. Located in Omaha, Nebraska the molecular clinical reference laboratory operates in a Good Laboratory Practices compliant environment, is certified under the Clinical Laboratory Improvement Amendment (CLIA) as a high complexity lab and is accredited by CAP (College of American Pathologists).

- Pharmacogenomics Research Services. Pharmacogenomics research services are provided by our Contract Research Organization located in Omaha, Nebraska. It specializes in pharmocogenomic, biomarker and mutation discovery research serving the pharmaceutical and biomedical industries world-wide for disease research, drug and diagnostic development and clinical trial support.

Although we have experienced declining sales and recurring net losses (resulting in an accumulated deficit of $130.2 million at December 31, 2009), management believes existing sources of liquidity, including cash and cash equivalents of $5.6 million, are sufficient to meet expected cash needs during 2010. Our business consolidation efforts have helped control our operating costs, however we will need to increase net sales in order to meet our liquidity needs on a long-term basis. If

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

we cannot increase net sales, further reductions to operating expenses will be needed. In future periods, there is no assurance that we will be able to increase net sales or further reduce expenses and, accordingly, we may not have sufficient sources of liquidity to continue operations indefinitely.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation.

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

Risks and Uncertainties.

Certain risks and uncertainties are inherent in 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.

1. 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. Actual results could differ from the estimates and assumptions used in preparing these financial statements.

2. Concentration of Revenue Risk.

No customer accounted for more than 10% of consolidated net sales during the years ended December 31, 2009 and 2008. For the year ended December 31, 2009 one customer made up more than 20% of the Laboratory Services net sales. For the year ended December 31, 2008 four customers each made up more than 10% of the Laboratory Services net sales and combined they represent 56% of the Laboratory Services net sales. We have additional risk due to the global economic crisis.

Fair Value.

Unless otherwise specified, book value approximates fair market value.

Cash and Cash Equivalents.

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

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

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, 2009.

Accounts Receivable.

The following is a summary of activity for the allowance for doubtful accounts during the years ended December 31, 2009 and 2008:

	Dollars in Thousands			
	Beginning Balance	Provision	Write Offs	Ending Balance
Year Ended December 31, 2009	$ 388	$ (8)	$ (70)	$ 310
Year Ended December 31, 2008	$ 703	$ 123	$ (438)	$ 388

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 may be greater than 90 days. Accounts receivable are carried at original invoice and shown net of allowance for doubtful accounts. The estimate made for doubtful accounts is based on a review of all outstanding amounts on a quarterly basis. We determine the allowance for doubtful accounts by regularly evaluating individual customer receivables and considering a customer s financial condition, credit history and current economic conditions. Account receivables are written off when deemed uncollectible. Recoveries of account receivables previously written off are recorded when received.

Inventories.

Inventories are stated at the lower of cost or market net of allowance for obsolete 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.

The following is a summary of activity for the allowance for obsolete inventory during the twelve months ended December 31, 2009 and 2008:

	Dollars in Thousands			
	Beginning Balance	Provision	Write Offs	Ending Balance
Year Ended December 31, 2009	$ 108	$ 482	$ (83)	$ 507
Year Ended December 31, 2008	$ 12	$ 96	$	$ 108

We determine the allowance for obsolete inventory by quarterly evaluating the inventory for items deemed to be slow moving or obsolete. During the year ended December 31, 2009 we recorded $0.3 million related to control plasmids used for our SURVEYOR kits, $0.1 million related to our older low throughput instruments and $0.1 million related to the transition in our bioconsumables from a steel syringe delivery method to a disposable delivery method.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

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 of property and equipment totaled $0.6 million in both years ended 2009 and 2008.

Goodwill.

ASC 820 Fair Value Measurements and Disclosures provides that goodwill will not be amortized, but will be tested for impairment annually. We performed this impairment analysis during the fourth quarter of each year or when significant event occurred which may impact goodwill impairment. Impairment occurs when the carrying value is determined to be not recoverable thereby causing the carrying of the goodwill to exceed the fair value. If impaired, the asset s carrying value is reduced to its fair value. Goodwill was impaired at December 31, 2008 and was written off based on our analysis.

Net sales in the WAVE related business, for which the goodwill was attached, declined over 15% during the four years ended December 31, 2008. We made no significant investment to expand the offering or upgrade the current WAVE instrument.

Other Assets.

Other assets include intellectual property, patents and other long-term assets.

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.

Each of these assets is treated as long-lived assets. Long-lived assets will be tested for impairment on an annual basis or when a significant event occurs, which may impact impairment. We quarterly review the carrying value of our long-lived assets to assess recoverability and impairment. We recorded no impairments during 2008. In 2009 we recorded less than $0.1 million

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

related to accelerated amortization on two license agreements that we plan to terminate in the first quarter of 2010.

3. Other Long Term Assets. Other long term assets include US security deposits and deferred tax assets.

Stock Based Compensation.

All stock options awarded 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, 2009 had vesting periods of three years from date of grant. None of the stock options outstanding at December 31, 2009 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 and is expensed ratably over the service period of the awards (generally the vesting period).

For the year ended December 31, 2009, we recorded compensation expense of $0.2 million within selling, general and administrative expense as a result of the vesting of options exercisable for the purchase of 1.7 million shares during the year. For the year ended December 31, 2008, we recorded compensation expense of $0.4 million within selling, general and administrative expense as a result of the vesting of options exercisable for the purchase of 1.7 million shares. As of December 31, 2009, there was $0.1 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over a weighted average period of nearly three years.

The fair value of the options granted during 2009 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 2.12% to 3.99%, based on the U.S. Treasury yield in effect at the time of grant; dividend yields of zero percent; expected lives of 5 to 10 years, based on historical exercise activity behavior; and volatility of 106.00% to 80.03% for grants made during the year ended December 31, 2009 based on the historical volatility of our stock over a time that is consistent with the expected life of the option. A small group of senior executives hold the majority of the stock options and are expected to hold the options until they are vested therefore no forfeitures have been assumed.

The fair value of the options granted during 2008 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 1.55% to 3.99%, based on the U.S. Treasury yield in effect at the time of grant; dividend yields of zero percent; expected lives of 2 to 10 years, based on historical exercise activity behavior; and volatility of 62.92% to 95.35% for grants made during the year ended December 31, 2008 based on the historical volatility of our stock over a time that is consistent with the expected life of the option. A small group of senior executives hold the majority of the stock options and are expected to hold the options until they are vested therefore no forfeitures have been assumed.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

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.

Net Sales Recognition.

Net sales on the sales of products 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 ratably recognized over the service period. At December 31, 2009 and December 31, 2008, deferred net sales mainly associated with our service contracts, included in the balance sheet in other current liabilities, was approximately $1.4 million and $1.5 million, respectively.

Net Sales from our Molecular Clinical Reference Laboratory Services are recognized on an individual test basis and takes place when the test report is completed, reviewed and sent to the client less the reserve for insurance, Medicare and Medicaid expected reimbursement. There are no deferred net sales associated with our Molecular Clinical Reference Laboratory. Adjustments to the allowances, based on actual receipts from the third party payers, are recorded upon settlement. In our Pharmacogenomics Research Services Group, we perform services on a project by project basis. When we get payment in advance we recognize revenue when we deliver the service. These projects typically do not extend beyond one year. At December 31, 2009 and 2008, deferred net sales associated with the pharmacogenomics research projects included in the balance sheet in other accrued expenses, was less than $0.1 million for each 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.

Foreign Currency Transactions.

Financial statements of the subsidiary outside the U.S. are measured using the local currencies as the functional currency. The adjustments to translate those amounts into U.S. dollars are

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

accumulated in a separate account in stockholders equity and are included in accumulated other comprehensive income. Foreign currency revaluation gains or losses resulting from changes in currency exchange rates are included in the determination of net income. Foreign currency revaluation adjustments increased both operating expenses and net loss by $0.3 million during the year ended December 31, 2009 and decreased both operating expenses and net loss by $1.0 million during the year ended December 31, 2008.

Comprehensive Income.

Accumulated other comprehensive income at December 31, 2009 and 2008 consisted of foreign currency translation adjustments, net of applicable tax of zero. We deem our foreign investments to be permanent in nature and do not provide for taxes on currency translation adjustments arising from converting investments in a foreign currency to U.S. dollars.

Earnings 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. Options, warrants and conversion rights pertaining to 11,309,887 and 11,524,786 shares of our common stock have been excluded from the computation of diluted earnings per share at December 31, 2009 and 2008, respectively. The options, warrants and conversion rights that were exercisable in 2008 and 2009 were not included because the effect would be anti-dilutive due to the net loss. As a result, none of our outstanding options, warrants or conversion rights affect the calculation of diluted earnings per share.

Recently Issued Accounting Pronouncements.

In June 2009, the FASB issued FASB ASC 105, Generally Accepted Accounting Principles, which establishes the FASB Accounting Standards Codification as the sole source of authoritative generally accepted accounting principles. Pursuant to the provisions of FASB ASC 105, the Company has updated references to GAAP in its financial statements issued for the period ended September 30, 2009. The adoption of FASB ASC 105 did not impact the Company s financial position or results of operations.

ASC 820, Fair Value Measurement and Disclosures defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. We have adopted ASC 820 with no impact on our financial statements.

ASC 350, Intangibles Goodwill and Other requires companies estimating the useful life of a recognized intangible asset to consider their historical experience in renewing or extending similar arrangements or, in the absence of historical experience, to consider assumptions that market participants would use about renewal or extension. ASC 350 was adopted on January 1, 2009 and had no impact on our financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

ASC 815-40, Derivatives and Hedging addresses freestanding contracts that are indexed to, and potentially settled in, an entity s own stock. We adopted ASC 815-40 on January 1, 2009. We have assessed our warrants and determined the fair value is $0 so there is no impact to our financial statements.

Accounting Standards Update No. 2009-13 addresses the accounting for multiple deliverable arrangements to enable vendors to account for products or services (deliverables) separately rather than as a combined unit. This update is effective for fiscal years on or after June 15, 2010.

Accounting Standards Update No. 2009-05 provides amendments to ASC Topic 820, Fair Value Measurements and Disclosure for the fair value measurement of liabilities. We have implemented ASU 2009-05 with no impact on our financial statements.

Accounting Standards Update No. 2009-14 addresses the accounting for revenue arrangements that contain tangible products and software. This update is effective for fiscal years beginning on or after June 15, 2010. We are currently assessing the impact to our financial statements.

C. RESTRUCTURING CHARGES

We recorded restructuring charges of $0.1 million in 2008 related to the additional lease expense on the shut down of the Paris facility due to changes in the market place causing our inability to sublease it of $0.3 million which was offset by reserves for fixed assets and severance of $0.2 million not utilized. We had a reserve totaling $0.2 million in other accrued expenses at December 31, 2008 related to the Paris, France facility. These costs are related to our instrument related segment. In addition, we took restructuring charges of less than $0.1 million related to severance due to the relocation of the laboratory from Gaithersburg, Maryland to Omaha, Nebraska. These costs are related to our laboratory services segment. No restructuring charges were recorded in 2009. We have a reserve totaling $0.1 million in other accrued expenses at December 31, 2009 related to the Paris, France facility.

D. INVENTORIES

Inventories (net of allowances for obsolescence) consisted of the following:

	Dollars in Thousands	
	December 31, 2009	**December 31, 2008**
Finished goods	$ 2,322	$ 2,911
Raw materials and work in process	1,588	1,766
Demonstration inventory	149	206
	$ 4,059	$ 4,883
Less allowance for obsolescence	(507)	(108)
Total	$ 3,552	$ 4,775

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

E. OTHER ASSETS

Finite lived intangible assets and other assets consisted of the following:

	Dollars in Thousands					
	December 31, 2009			December 31, 2008		
	Cost	Accumulated Amortization	Net Book Value	Cost	Accumulated Amortization	Net Book Value
Intellectual property	$ 310	$ 284	$ 26	$ 310	$ 195	$ 115
Patents	598	241	357	679	230	449
Other long term assets	200		200	209		209
Total	$ 1,108	$ 525	$ 583	$ 1,198	$ 425	$ 773

During 2009 we accelerated amortization on two intellectual property license agreements that we plan to terminate in the first quarter of 2010. In addition we accelerated amortization on another license agreement, however, we are not terminating that agreement. In total the change to the net book value of intellectual property was less than $0.1 million. We wrote off less than $0.1 million in patents that we are no longer using. During 2008 we wrote off several license agreements that were terminated and which were fully amortized. Other assets include US security deposits and deferred tax assets.

Amortization expense for intangible assets was less than $0.1 million during both years ended December 31, 2009 and 2008. Amortization expense for intangible assets is expected to be less than $.1 million in each of years 2010 and thereafter.

F. 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.

We lease certain equipment, vehicles and operating facilities under non-cancellable operating leases that expire on various dates through 2014. The future minimum lease payments required under these leases are approximately $0.9 million in 2010, $0.6 million in 2011, $0.3 million in 2012, $0.1 million in 2013 and $0.1 million in 2014. Rent expense for each of the years ended December 31, 2009 and 2008 was $0.8 million.

We have entered into employment agreements with Craig J. Tuttle, our President and Chief Executive Officer, Debra A. Schneider, our Chief Financial Officer, Vice President, Secretary and Treasurer, and Eric P. Kaldjian M.D., our Chief Scientific Officer. The current term of Mr. Tuttle s employment agreement ends on July 12, 2010. The current term of Ms. Schneider s employment agreement ends on December 4, 2010. The current term of Dr. Kaldjian s employment agreement ends on December 31, 2010. Each employment agreement provides that the executive officer will be entitled to receive severance payments from the Company if his or her employment is terminated involuntarily

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

except if such termination is based on just cause , as that term is defined in the employment agreement. The severance payment payable in the event of involuntary termination without just cause is equal to their annual base salary at the time of termination and will be paid to them over a twelve-month period. The employment agreements provide that the severance payment provisions will be honored if the Company is acquired by, or merged into, another company and their positions are eliminated as a result of such acquisition or merger. In addition we have one employee who is entitled to a severance payment of less than $0.1 million if the employee s position is eliminated prior to July 2012.

At December 31, 2009, firm commitments to vendors to purchase components used in WAVE Systems and instruments manufactured by others totaled $0.6 million.

G. INCOME TAXES

The Company s provision for income taxes for the years ended December 31, 2009 and 2008 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	
	2009	**2008**
Benefit at federal rate	$ (639)	$ (96)
Increase (decrease) resulting from:		
State income taxes net of federal benefit	(10)	(65)
Foreign subsidiary tax rate difference	(50)	(67)
FIN 48	48	5
Net operating loss expiration	1,258	
Miscellaneous permanent differences	93	29
Other net	(33)	(104)
Valuation allowance	(625)	511
Current income tax expense	$ 42	$ 213

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

	Dollars in Thousands	
	2009	**2008**
Federal:		
Current	$ (58)	$
Deferred		
Total Federal	$ (58)	$
State:		
Current	$ (16)	$
Deferred		
Total State	$ (16)	$
Foreign:		
Current	$ (60)	$ 318
Deferred	176	(105)
Total Foreign	$ 116	$ 213
Total Tax Provision	$ 42	$ 213

The Company s deferred income tax asset from continuing and discontinued operations at December 31, 2009 and 2008 is comprised of the following temporary differences:

	Dollars in Thousands	
	2009	**2008**
Deferred Tax Asset:		
Net operating loss carryforward	$ 38,688	$ 39,449
Research and development credit carryforwards	1,355	1,340
Deferred net sales	194	253
Inventory	186	41
Other	350	323
	40,773	41,406
Less valuation allowance	(40,639)	(41,264)
Deferred Tax Asset	$ 134	$ 142
Deferred Tax Liability		
Uninstalled instruments	$ 183	$ 37
Deferred Tax Liability	$ 183	$ 37
Net Deferred Asset (Liability)	$ (49)	$ 105

At December 31, 2009, we had total unused federal tax net operating loss carryforwards from continuing and discontinued operations of $107.2 million of which $2.9 million expires in 2010, $.9 million expires in 2011, $3.4 million expires in 2012, $1.8 million expires in 2018, $8.2

million expires in 2019, $9.7 million expires in 2020, $8.2 million expires in 2021, $16.9 million expires in 2022, $16.2 million expires in 2023, $17.4 million expires in 2024, $8.2 million expires in 2025, $6.8 million expires in 2026, $3.2 million expires in 2027, $1.3 million expires in 2028 and $2.1 million expires in

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

2029. Of these federal net operating loss carryforwards, $6.4 million were obtained in the acquisition of Annovis, Inc. and may be subject to certain restrictions. At December 31, 2009, we had unused state tax net operating loss carryforwards from continuing and discontinued operations of approximately $41.0 million that expire at various times beginning in 2010. At December 31, 2009, we had unused research and development credit carryforwards from continuing and discontinued operations of $1.4 million that expire at various times between 2010 and 2024. A net deferred tax liability was recorded during 2009 related to the UK income taxes for less than $0.1 million. A valuation allowance has been provided for the remaining 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.

We had no material unrecognized tax benefits, interest, or penalties during fiscal 2009 or fiscal 2008, 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 2007 and 2008. We have state income tax returns subject to examination primarily for tax years 2006 through 2008. 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 2006 through 2008.

During the years ended December 31, 2009 and 2008, there were no material changes to the liability for uncertain tax positions.

H. EMPLOYEE BENEFIT PLAN

We maintain an employee 401(k) retirement savings plan that allows for voluntary contributions into designated investment funds by eligible employees. Prior to June 1, 2009 we matched the employee s contributions at the rate of 50% on the first 6% of contributions. Effective June 1, 2009, Transgenomic discontinued matching employee 401(k) contributions. We may, at the discretion of our Board of Directors, make additional contributions on behalf of the Plan s participants. There were no contributions to the 401(k) plan in the third and fourth quarters of 2009. Contributions to the 401(k) plan were less than $0.1 million for the year ended December 31, 2009. Contributions to the 401(k) plan were $0.2 million for the year ended December 31, 2008.

I. STOCKHOLDERS EQUITY

Common Stock.

The Company s Board of Directors is authorized to issue up to 100,000,000 shares of common stock, from time to time, as provided in a resolution or resolutions adopted by the Board of Directors.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

Common Stock Warrants.

No common stock warrants were issued or exercised during 2009 or 2008. At December 31, 2009, there were warrants outstanding which were exercisable to purchase 7,978,156 shares of common stock.

Warrant Holder	Issue Year	Expiration Year	Underlying Shares	Exercise Price
Various Institution Holders [1]	2005	2010	6,903,156	$ 1.20
Laurus Master Fund, Ltd. [2]	2003	2010	200,000	$ 1.92
Laurus Master Fund, Ltd. [2]	2003	2010	200,000	$ 2.07
Laurus Master Fund, Ltd. [2]	2003	2010	150,000	$ 2.35
Laurus Master Fund, Ltd. [2]	2004	2011	125,000	$ 2.57
Laurus Master Fund, Ltd. [2]	2004	2011	400,000	$ 1.18
Total			7,978,156	

(1) These warrants were issued in conjunction with a private placement of common stock in October 2005.

(2) These warrants were issued in conjunction with two loans that had been made to us by Laurus Master Fund, Ltd. (the Laurus Loans), and subsequent modifications of these loans. In conjunction with the 2005 private placement, the exercise prices of these warrants were adjusted according to repricing provisions contained in the original warrant agreements. While the Laurus Loans have been terminated, the warrants remain outstanding. Due to the repricing provision, these warrants are considered liabilities for financial reporting purposes.

Preferred Stock.

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. The Company has no current plans to issue any series of 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 preferred stock issued by the Company could have an adverse effect on the rights of the holders of the common stock.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

J. 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. The Plan was adopted in 2006 as a modification of the Company s 1997 Stock Option Plan (the Prior Plan). In addition to providing for additional types of equity-based awards, the Plan increased the total number of shares of common stock that the Company may issue from 7,000,000 under the Prior Plan to 10,000,000 shares under the Plan; provided, that no more than 5,000,000 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 nonqualified stock options may be granted to nonemployee 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 Compensation Committee and expire 10 years after the date the option was granted. To date, the only awards made under the Plan (and the Prior Plan) have been non-incentive stock options.

For the year ended December 31, 2009, we recorded compensation expense of $0.2 million within selling, general and administrative expense as a result of the vesting of options exercisable for the purchase of 1.7 million shares during the year. For the year ended December 31, 2008, we recorded compensation expense of $0.4 million within selling, general and administrative expense as a result of the vesting of options exercisable for the purchase of 1.7 million shares. As of December 31, 2009, there was $0.1 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over a weighted average period of nearly three years.

The fair value of the options granted during 2009 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 2.12% to 3.99%, based on the U.S. Treasury yield in effect at the time of grant; dividend yields of zero percent; expected lives of 5 to 10 years, based on historical exercise activity behavior; and volatility of 106.08% to 80.03% for grants made during the year ended December 31, 2009 based on the historical volatility of our stock over a time that is consistent with the expected life of the option. A small group of senior executives hold the majority of the stock options and are expected to hold the options until they are vested therefore minimal forfeitures have been assumed.

The fair value of the options granted during 2008 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 1.55% to 3.99%, based on the U.S. Treasury yield in effect at the time of grant; dividend yields of zero percent; expected lives of 2 to 10 years, based on historical

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

exercise activity behavior; and volatility of 62.92% to 95.35% for grants made during the year ended December 31, 2008 based on the historical volatility of our stock over a time that is consistent with the expected life of the option. A small group of senior executives hold the majority of the stock options and are expected to hold the options until they are vested therefore no forfeitures have been assumed.

The following table summarizes activity under the Plan (and the Prior Plan) during the year ended December 31, 2009:

	Number of Options	Weighted Average Exercise Price
Balance at January 1, 2009:	3,531,064	$ 2.54
Granted	70,000	.42
Exercised		
Forfeited	(72,833)	(1.3931)
Expired	(196,500)	(4.8530)
Balance at December 31, 2009:	3,331,731	$ 2.39
Exercisable at December 31, 2009	2,518,671	$ 2.96

The following table summarizes activity under the Plan (and the Prior Plan) during the year ended December 31, 2008:

	Number of Options	Weighted Average Exercise Price
Balance at January 1, 2008:	4,535,064	$ 3.26
Granted	350,000	.66
Exercised		
Forfeited/Expired	(1,354,000)	4.44
Balance at December 31, 2008:	3,531,064	$ 2.54
Exercisable at December 31, 2008	2,251,202	$ 3.62

The following table summarizes the stock options that were issued during the year ended December 31, 2009:

	Number of Options	Exercise Price
January 15, 2009	25,000	$ 0.36
May 20, 2009	45,000	$ 0.45
	70,000	

The weighted average grant date fair value per share of options granted during the years ended December 31, 2009 and 2008 was $0.33 and $0.53 respectively.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

The following summarizes all stock options outstanding at December 31, 2009:

Exercise Price Range	Number of Options Outstanding	Remaining Weighted-Average Contractual Life	Weighted Average Exercise Price	Number of Options Exercisable
$ 0.00 $ 1.30	2,313,667	6.9 years	$ 0.76	1,500,607
$ 1.31 $ 2.60	318,333	3.4 years	$ 1.94	318,333
$ 2.61 $ 3.90	10,000	2.8 years	$ 2.90	10,000
$ 5.21 $ 6.50	448,000	1.4 years	$ 6.10	448,000
$ 7.81 $ 9.10	10,000	1.4 years	$ 9.00	10,000
$ 9.11 $10.40	84,500	1.5 years	$ 9.90	84,500
$11.71 $13.00	147,231	.3 years	$12.85	147,231
	3,331,731			2,518,671

All stock options outstanding were issued to employees or outside directors.

The aggregate intrinsic value of stock options exercisable was less than $0.1 million at December 31, 2009. The aggregate intrinsic value of stock options outstanding was $0.1 million at December 31, 2009. No stock options were exercised in the years ended December 31, 2009 and 2008.

K. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION

Our company s chief decision-maker as defined in FAS 131, Disclosures about Segments of an Enterprise and Related Information, is the Chief Executive Officer, who regularly evaluates our performance based on net sales and gross profit. The preparation of this segment analysis required management to make estimates and assumptions around expense below the gross profit level. While we believe the segment information to be directionally correct, actual results could differ from the estimates and assumptions used in preparing this information.

The accounting policies of the segments are the same as the policies discussed in Footnote B Summary of Significant Accounting Policies.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

Segment information for the years ended December 31, 2009 and 2008 is as follows:

	Dollars in Thousands					
	2009			2008		
	Instrument Business	Lab Services	Total	Instrument Business	Lab Services	Total
Net Sales	$ 17,457	$ 4,566	$ 22,023	$ 19,744	$ 4,249	$ 23,993
Gross Profit	9,877	1,728	11,605	11,716	1,932	13,648
Net Income/(Loss) before Taxes	395	(2,273)	(1,878)	411	(693)	(282)
Income Taxes	42		42	213		213
Net Income/(Loss)	$ 353	$ (2,273)	$ (1,920)	$ 198	$ (693)	$ (495)
Depreciation/Amortization	450	296	746	566	206	772
Restructure				110	8	118
Goodwill Impairment				638		638
Interest Income	11	4	15	61	13	74
Net Assets	8,547	7,457	16,004	10,226	7,330	17,556

We have two reportable operating segments. Net sales by product were as follows:

	Dollars in Thousands Years Ended December 31,	
	2009	2008
Instrument Related Business:		
Bioinstruments	$ 10,175	$ 11,195
Bioconsumables	7,282	8,549
	17,457	19,744
Laboratory Services:		
Molecular Clinical Reference Laboratory	3,541	2,870
Pharmacogenomics Research Services	1,025	1,379
	4,566	4,249
Total Net Sales	$ 22,023	$ 23,993

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

Net cost of goods sold were as follows:

	Dollars in Thousands Years Ended December 31,	
	2009	2008
Instrument Related Business:		
Bioinstruments	$ 3,801	$ 4,046
Bioconsumables	3,779	3,982
	7,580	8,028
Laboratory Services:		
Molecular Clinical Reference Laboratory	2,018	1,647
Pharmacogenomics Research Services	820	670
	2,838	2,317
Total Cost of Goods Sold	$ 10,418	$ 10,345

Net sales for the year ended December 31, 2009 by country were as follows:

	Dollars in Thousands Years Ended December 31,	
	2009	2008
United States	$ 8,777	$ 9,399
Italy	3,683	2,913
France	1,545	2,393
Netherlands	1,464	584
Germany	1,383	1,770
United Kingdom	842	1,290
All Other Countries	4,329	5,644
Total	$ 22,023	$ 23,993

No other country accounted for more than 5% of total net sales.

No customer accounted for more than 10% of consolidated net sales during the years ended December 31, 2009 and 2008. For the year ended December 31, 2009 one customer made up 20% of the Laboratory Services net sales. For the year ended December 31, 2008 four customers each made up more than 10% of the Laboratory Services net sales and combined they represent 56% of the Laboratory Services net sales.

Approximately 80% of our long-lived assets are within the United States. Substantially all of the remaining long-lived assets are within Europe.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Years Ended December 31, 2009 and 2008

K. SUBSEQUENT EVENTS

Events or transactions that occur after the balance sheet date, but before the financial statements are complete, are reviewed to determine if they should be recognized. We have no material subsequent events to be disclosed.

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

Item 9A(T). 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 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 Exchange Act. Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in the report we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC s forms, and that such information is accumulated and communicated to our management including our Chief Executive Officer and our Chief Financial Officer, to allow timely decisions regarding required disclosures. Based on the evaluation, the Company s Chief Executive Officer and our Chief Financial Officer concluded that, as of December 31, 2009, Transgenomic s disclosure controls and procedures were effective.

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

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projection of any evaluation of effectiveness to future periods is subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has conducted, with the participation of our Chief Executive Officer and our Chief Financial Officer, an assessment, including testing of the effectiveness of our internal control over financial reporting as of December 31, 2009. Management s assessment of internal control over financial reporting was conducted using the criteria in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that assessment, Management has concluded that the Company s internal control over financial reporting was effective as of December 31, 2009.

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 temporary rules of the Securities and Exchange Commission that permit the Company to provide only management s report in this Annual Report.

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(c) ***Remediation of Material Weaknesses in Internal Control Over Financial Reporting***

In Item 9A of our Annual Report on Form 10K for the fiscal year ended December 31, 2008, management reported a material weakness in its internal control over financial reporting:

Management s evaluation of the design and operating effectiveness of our internal controls over financial reporting identified a material weakness resulting from the combination of more than one significant deficiency. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, because of the material weakness in our internal control over financial reporting, our internal control over financial reporting as defined rule 13a-15(f) was not effective. Policies and procedures that were not formally documented, lack of segregation of duties, access authorization to our computer systems and financial reporting all were areas that were assessed as having a significant deficiency. A material weakness is defined as a significant deficiency or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

Management s remediation plan to address the material weakness described above was substantially completed in 2009 and included the following steps taken to strengthen internal control over financial reporting:

- We have strengthened both the design, and our evaluation of the operating effectiveness of internal controls.
- We have documented formal security and business policies and procedures.
- We have reviewed the functions of the employees in the accounting department to determine the cost benefit associated with proper segregation of duties. Certain functions were re-aligned, and additional review and approval procedures were implemented to mitigate remaining segregation of duties conflicts.
- We have developed standard procedures for granting user access to our computer system.
- We have developed additional procedures to ensure proper financial reporting, including additional review steps by senior financial management during our period end financial close process.

(d) ***Changes in internal control over financial reporting***

Other than the remediation actions noted above, there have been no changes in internal control over financial reporting that occurred during the quarter ended December 31, 2009 that have materially affected, or are reasonably likely to materially affect, Transgenomic s internal control over financial reporting.

Item 9B. Other Information.

None.

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Part III

Item 10. Directors, Executive Officers and Corporate Governance.

Information relating to our Board of Directors, including information regarding Craig Tuttle, our President and Chief Executive Officer who is also a director, and other information related to corporate governance, required by this item is incorporated by reference to the Proxy Statement for the Company s 2010 Annual Meeting of Stockholders (the Proxy Statement) under the caption Board of Directors and Committees. Information regarding our other executive officers who are not directors is set forth below.

Debra A Schneider. Ms. Schneider, age 51, joined Transgenomic Inc. in December, 2006 and currently serves as Vice President and Chief Financial Officer. She also is its Secretary and Treasurer. Prior to joining Transgenomic, Ms. Schneider spent seventeen years at First Data Corporation in a number of roles, including finance, planning, accounting and Chief Financial Officer roles for various business units. Most recently, she served as Senior Vice President of Finance. Prior to her tenure at First Data Corporation, she worked as Controller at Creative Financing, Inc. and as an accountant with KPMG LLP.

Eric Kaldjian, M.D. Dr. Kaldjian, age 48, joined Transgenomic in December 2007 as Chief Scientific Officer. Dr. Kaldjian earned his MD and residency training in pathology at the University of Michigan before his fellowship training at the national Cancer Institute, NIH. His experience includes a broad range of responsibilities in pharmaceutical research in drug discovery, toxicology, and exploratory and full clinical development at Pfizer, Parke-Davis and Hoffman-LaRoche, where he participated in successful filings of oncology and transplant drugs. Immediately prior to Transgenomic, Dr. Kaldjian served as Executive Director, Medical Sciences at Gene Logic, Inc., directing programs that included clinical genomics, biomarkers and molecular diagnostics development. He is board certified in Anatomic Pathology.

Chad Richards. Mr. Richards, age 40, joined Transgenomic in October 2007 as Senior Vice President, Sales and Marketing. Before joining Transgenomic, Mr. Richards was the National Sales Director for Anatomic Pathology with Quest Diagnostics. During his career with Quest Diagnostics, Mr. Richards held a variety of sales management roles in both their physician and hospital business segments. Before joining Quest Diagnostics, Mr. Richards held different marketing and sales management roles with Ventana Medical Systems, one of the world s leading developers and manufacturers of immunohistochemistry and in-situ hybridization instruments and reagent systems. Before embarking on a career in diagnostics, Mr. Richards served in the United States Marine Corps.

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Item 11. Executive Compensation.

Certain information required by this Item is incorporated by reference to the Proxy Statement under the caption Executive Compensation.

Securities authorized for issuance under equity compensation plans.

The following equity compensation plan information summarizes plans and securities approved and not approved by security holders as of December 31, 2009.

PLAN CATEGORY	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)
Equity compensation plans approved by security holders (1)	3,331,731	$ 2.39	5,914,500
Equity compensation plans not approved by security holders			
Total	3,331,731	$ 2.39	5,914,500

(1) Consists of our 2006 Equity Compensation Plan

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information required by this Item is incorporated by reference to the Proxy Statement under the caption Voting Securities and Beneficial Ownership by Principal Stockholders and our Directors and Officers.

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

Information required by this Item is incorporated by reference to the Proxy Statement under the captions Certain Relationships and Related Transactions and Board of Directors and Committees .

Item 14. Principal Accounting Fees and Services.

Information required by this Item is incorporated by reference to the Proxy Statement under the caption Accounting Fees and Services.

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.

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Consolidated Balance Sheets of the Registrant and Subsidiary as of December 31, 2009 and 2008.

Consolidated Statements of Operations of the Registrant and Subsidiary for the years ended December 31, 2009 and 2008.

Consolidated Statements of Stockholders Equity of the Registrant and Subsidiary for the years ended December 31, 2009 and 2008.

Consolidated Statements of Cash Flows of the Registrant and Subsidiary for the years ended December 31, 2009 and 2008.

Notes to Consolidated Financial Statements of the Registrant and Subsidiary.

2. Financial Statement Schedules.

None.

3. Exhibits. The following exhibits were 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:

3.1 Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to Registrant s Report on Form 10-Q (Registration No. 000-30975) filed on November 14, 2005.

3.2 Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).

4. Form of Certificate of the Registrant s Common Stock (incorporated by reference to Exhibit 4 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).

10.1 2006 Equity Incentive Plan of the Registrant (incorporated by reference to Exhibit 4(b) to Registration on Form S-8 (Registration No. 333-139999) filed on January 16, 2007.

10.2 1999 UK Approved Stock Option Sub Plan of the Registrant (incorporated by reference to Exhibit 10.7 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).

10.3 Employee Stock Purchase Plan of the Registrant (incorporated by reference to Exhibit 4(b) to Registration Statement on Form S-8 (Registration No. 333-71866) filed on October 19, 2001).

10.4 Employment Agreement between the Company and Craig J. Tuttle dated July 12, 2006 (incorporated by reference to Exhibit 10.1 to Registrant s Report on Form 8-K (Registration No. 000-30975) filed on July 12, 2006.

10.5 Amendment No. 1 to the Employment Agreement between the Company and Craig J. Tuttle, effective July 12, 2006 (incorporated by reference to Exhibit 10.1 to Registrant s Report on Form 10-Q (Registration No. 000-30975) filed on November 14, 2006.

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10.6 Employment Agreement between the Company and Debra A. Schneider, effective December 4, 2006, (incorporated by reference to Exhibit 10.1 to Registrant s Report on Form 8-K (Registration No. 000-30975) filed on November 15, 2006.

10.7 License Agreement, dated September 1, 1994, between Registrant and Professor Dr. Gunther Bonn, et. al. and Amendment thereto, dated March 14, 1997 (incorporated by reference to Exhibit 10.14 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).

10.8 License Agreement, dated August 20, 1997, between the Registrant and Leland Stanford Junior University (incorporated by reference to Exhibit 10.15 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).

10.9 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 Registrant s Annual Report on Form 10-K filed on March 25, 2002).

10.10 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 Registrant s Annual Report on Form 10-K filed on March 25, 2002).

10.11 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 Registrant s Quarterly Report on Form 10-Q filed on August 14, 2002).

10.12 License Amendment Agreement, dated June 2, 2003, by and between Geron Corporation and the Registrant (incorporated by reference to Exhibit 10.2 to Registrant s Quarterly Report on Form 10-Q filed on August 12, 2003).

10.13 Supply Agreement, dated January 1, 2000, between the Registrant and Hitachi Instruments (incorporated by reference to Exhibit 10.16 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).

10.14 Common Stock Purchase Warrant by and between the Registrant and Laurus Master Fund, Ltd., dated December 3, 2003 (incorporated by reference to Exhibit 10.4 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-111442) filed on December 22, 2003).

10.15 Registration Rights Agreement by and between the Registrant and Laurus Master Fund, Ltd., dated December 3, 2003 (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-111442) filed on December 22, 2003).

10.16 Common Stock Purchase Warrant by and between the Registrant and TN Capital Equities, Ltd., dated December 3, 2003 (incorporated by reference to Exhibit 10.6 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-111442) filed on December 22, 2003).

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10.17 Securities Purchase Agreement by and between the Registrant and Laurus Master Fund, Ltd., dated February 19, 2004, as amended on April 15, 2004 (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-114661) filed on April 21, 2004).

10.18 Amendment to Securities Purchase Agreement and Related Document by and between the Registrant and Laurus Master Fund, Ltd., dated August 31, 2004 (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-3 (Registration No. 333-118970) as filed on September 14, 2004).

10.19 Common Stock Purchase Warrant by and between the Registrant and Laurus Master Fund, Ltd., dated February 19, 2004, as amended on April 15, 2004 (incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-114661) filed on April 21, 2004).

10.20 Registration Rights Agreement by and between the Registrant and Laurus Master Fund, Ltd., dated February 19, 2004 (incorporated by reference to Exhibit 10.4 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-114661) filed on April 21, 2004).

10.21 Common Stock Purchase Warrants by and between the Registrant and TN Capital Equities, Ltd., dated March 1, 2004 (incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-114661) filed on April 21, 2004).

10.22 Common Stock Purchase Warrant by and between the Registrant and Laurus Master Fund, Ltd., dated August 31, 2004 (incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-3 (Registration No. 333-118970) as filed on September 14, 2004).

10.23 Form of Securities Purchase Agreement by and between the Registrant and various counterparties dated September 22, 2005 (incorporated by reference to Exhibit 10.1 to the Registrants Quarterly Report on Form 10-Q filed on November 14, 2005).

10.24 Common Stock Purchase Warrant by and between the Registrant and Oppenheimer & Co., Inc. dated October 27, 2005 (incorporated by reference to Exhibit 10.34 to the Registrants Annual Report on Form 10-K filed on March 31, 2006).

10.25 Letter Agreement by and between the Registrant and Laurus Master Fund, Ltd. dated October 31, 2005 (incorporated by reference to Exhibit 10.36 to the Registrants Annual Report on Form 10-K filed on March 31, 2006).

10.26 Employment Agreement Extension between the Company and Craig Tuttle dated July 12, 2008 (incorporated by reference to Registrant s Report on Form 8-K (Registration No. 000-30975) filed on July 16, 2008).

10.27 License Agreement between the Company 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).

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10.28 License Agreement between the Company and Power3 Medical Products, Inc. dated January 23, 2009 (incorporated by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q filed on November 5, 2009).

21 Subsidiaries of the Registrant.

23 Consent of Independent Registered Public Accounting Firm.

24 Powers of Attorney.

31 Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32 Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 25th day of February 2010.

TRANSGENOMIC, INC.

By: /s/ CRAIG J. TUTTLE
Craig J. Tuttle,

President and Chief Executive Officer

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on this 25th day of February 2010.

Signature	Title
/s/ CRAIG J. TUTTLE Craig J. Tuttle	Director, President and Chief Executive Officer (Principal Executive Officer)
/s/ DEBRA A. SCHNEIDER Debra A. Schneider	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
/s/ RODNEY S. MARKIN* Rodney S. Markin	Director
/s/ GREGORY T. SLOMA* Gregory T. Sloma	Director
/s/ JEFFREY L. SKLAR* Jeffrey L. Sklar	Director
/s/ MICHAEL B. McNULTY* Michael B. McNulty	Director
/s/ ANTONIUS P. SCHUH* Antonius P. Schuh	Director

*By Craig J. Tuttle, as attorney-in-fact
/s/ CRAIG J. TUTTLE
Craig J. Tuttle

Attorney-in-fact for the individuals as indicated.