TRANSGENOMIC INC
Form 10-K
March 28, 2008
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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, 2007**

**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 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 Form 10-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 $27.9 million.

At March 30, 2008, the registrant had 49,189,672 shares of Common Stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant Proxy Statement relating to its 2008 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, 2007**



This Annual Report on Form 10-K references the following registered trademarks which are the property of Transgenomic: 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: 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 Annual Report on Form 10-K contains or incorporates by reference certain forward-looking statements. Many of these forward-looking statements refer to our plans, objectives, expectations and intentions, as well as our future financial results and are subject to risk and uncertainty. You can identify these forward-looking statements by words such as expects, anticipates, intends, plans, may, will, believ estimates and similar expressions. Because these forward-looking statements involve risks and uncertainties, there are many factors that could cause our actual results to differ materially from those expressed or implied by these forward-looking statements, including those discussed under Item 1A Risk Factors and other factors identified by cautionary language used elsewhere in the Annual Report on Form 10-K.

**Item 1. Our Business**

We provide innovative products for the synthesis, 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 bioinstruments, bioconsumables and discovery services.

- 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 world-wide installed base of over 1,400 WAVE Systems as of December 31, 2007. 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 systems continued operation. We develop, manufacture and sell these 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 high pressure liquid chromatography ( HPLC ) separation columns.

- Discovery Services. Our Pharmacogenomics Research Service group is a contract research lab in Gaithersburg, Maryland that primarily provides genomic biomarker analysis services to pharmaceutical and biopharmaceutical companies to support preclinical and clinical development of targeted therapeutics. Our Molecular Clinical Reference Laboratory, in Omaha, Nebraska provides molecular-based testing for hematology, oncology and certain inherited diseases for physicians and third-party laboratories. The Molecular Clinical Reference Laboratory operates in a Good Laboratory Practices ( GLP ) compliant environment and is certified under the Clinical Laboratory Improvement Amendment.

Historically, we operated a segment (the Nucleic Acids operating segment ) that developed, manufactured and marketed chemical building blocks for nucleic acid synthesis. In the fourth quarter of 2005, we implemented a plan to exit the Nucleic Acids operating segment and have recently completed the sale of the remaining assets associated with this segment. Accordingly, the assets and results of the Nucleic Acids operating segment are reflected as discontinued operations for all periods presented in this filing.

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**Business Strategy**

Since inception, our business strategy has been to provide products and services to biomedical researchers, medical institutions, diagnostic and pharmaceutical companies that are tied to advancements in the field of genomics. 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. Through an expanding base of installed systems, we expect to increase the sales of consumable products used with the WAVE System and create opportunities to market additional products to this customer base.

Over the last year our strategy has shifted somewhat to include another area of strategic focus that we believe can provide significant opportunity. Through our Discovery Services offerings, 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. 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. We believe there is a significant opportunity for us to capitalize on the increasing demand for molecular-based personalized medicine by leveraging on our technologies and experience gained from the genomic biomarker analysis that our Discovery Services Group has and will continue to provide to pharmaceutical and biopharmaceutical companies.

**Significant Recent Events**

*We have continued to work to reduce operating costs*

On February 20, 2007, we announced a cost reduction plan designed to align our cost structure with anticipated revenues. The closing of the Company s Cramlington, England production facility was the principal component of this plan. All production is now being done in the United States at our Omaha, NE and San Jose, CA facilities. All administrative functions that were previously performed in France are now being performed in either the United States or in our one remaining international site, Glasgow, Scotland. Restructure charges were $1.5 million for the year ended December 31, 2007, relating primarily to severance, benefits and facility closure costs.

*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 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.

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**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., U.K. and most countries in Western Europe. For the rest of the world, we sell our products through dealers and distributors located in those local markets. We have over 35 dealers and distributors. We also maintain regionally-based technical support staffs and applications scientists to support our sales and marketing activities throughout the U.S. and Europe. The nature of our instruments and bioconsumables 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 U.S. and foreign pharmaceutical, biotech and commercial companies. No customer accounts for more than 10% of consolidated net sales.

**Research and Development**

We will need to continue to invest in research and development activities in order to remain competitive and to take advantage of new business opportunities as they arise. Accordingly, we maintain an active program of research and development with respect to bioinstruments, consumables and discovery services. Areas of focus include the improvement of the DNA separation media used in our WAVE System, the refinement of the hardware and software components of the WAVE System, the creation of unique enzymes and WAVE-Optimized enzymes, and the development of assays on the WAVE System. We have also focused on further refinements and process manufacturing improvements for our Surveyor DNA mismatch cutting enzyme. A significant area of research in discovery services is the area of cancer detection screening and mitochondrial disease diagnosis.

For the years ended December 31, 2007, 2006 and 2005, our research and development expenses were $3.0 million, $2.4 million and $2.2 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.

**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. We presently own rights to 68 issued patents and 14 pending applications in both the U.S. and abroad. Our WAVE System and related consumables are protected by patents and in-licensed technologies that expire in various periods beginning in 2013 through 2022. 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.

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**Competition**

The markets in which we operate are highly competitive and characterized by rapidly changing technological advances. A number of our competitors possess substantial resources 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 discovery services face competition from a number of companies offering contract DNA sequencing and other genomic analysis services, including Genizon, Clinical Data, SeqWright and others. In addition, several clinical diagnostics service providers, such as Labcorp, Quest, Athena and Specialty Laboratories, also offer related laboratory services in support of clinical trials. Finally, additional competition arises from academic core laboratory facilities.

**Employees**

As of December 31, 2007, 2006 and 2005, we had employees focused in the following areas of our operation:

| | December 31, | | |
|---|---|---|---|
| | **2007** | **2006** | **2005** |
| Manufacturing | 30 | 47 | 56 |
| Sales, Marketing and Administration | 76 | 65 | 73 |
| Research and Development | 10 | 16 | 10 |
| | 116 | 128 | 139 |
| Personnel associated with discontinued operations | | | 17 |
| | 116 | 128 | 156 |

Our employees were employed in the following geographical locations:

| | December 31, | | |
|---|---|---|---|
| | **2007** | **2006** | **2005** |
| United States | 89 | 84 | 94 |
| Europe (other than the United Kingdom) | 13 | 23 | 23 |
| United Kingdom | 14 | 21 | 39 |
| | 116 | 128 | 156 |

**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). We maintain manufacturing facilities in Omaha, Nebraska and San Jose, California. We maintain research and development offices in Gaithersburg, Maryland and Omaha, Nebraska.

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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, 2007, we had cash and cash equivalents of $5.7 million. While we believe that existing sources of liquidity are sufficient to meet expected cash needs through 2008, we will need to increase our revenues 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 revenues or further reduce our expenses 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 losses from continuing operations for the years ended December 31, 2007, 2006 and 2005 were $2.2 million, $3.0 million, and $5.0 million, respectively. These 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.

*Markets for our products and services may continue to develop slowly.*

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. If revenues 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. Similarly, the sales cycle for the OEM equipment that we sell can also be a lengthy

*Sales of our Discovery Services have been variable.*

Discovery services includes 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 doctor s offices and other providers of health

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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 Pharmocogenomics Laboratory 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.

*Compliance with HIPPA is time consuming and costly.*

The Health Insurance Portability and Accountability Act (HIPAA) and associated regulations protect the privacy and security of certain healthcare information and establish standards for electronic healthcare transactions in the United States. The 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 and 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 this business. We could also incur liabilities from third party claims.

*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 more than half of our total net sales. As a result, a major portion of our revenues 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; and
- 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.

*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 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 revenues.

*We may not have adequate personnel to execute our business plan.*

In order to reduce our operating costs, we have reduced the number of employees in all areas of the business. In addition, we may lose other key management, scientific, technical, sales and

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manufacturing personnel from time to time. It may be very difficult to replace personnel if they are needed in the future, and the loss of key personnel 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/or 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 substantial 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 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.

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*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. The delisting of our stock from the NASDAQ may negatively affect the volume of shares traded and the price for our stock. 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 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

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- 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, 2007, we had obligations to issue 12,583,879 shares of common stock including outstanding stock options representing 4,535,064 shares and warrants representing 8,048,815 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, 2007, 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

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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 and occupy 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 | 2008 Scheduled Rent | Lease Term Expires |
|---|---|---|---|---|
| Omaha, Nebraska | WAVE and Consumable Manufacturing | 25,000 | $130 | June 2009 |
| San Jose, California | Consumable Manufacturing | 14,360 | $165 | October 2010 |
| Cramlington, England | Consumable Manufacturing | 10,818 | $19 | March 2008 |
| Glasgow, Scotland | Multi Functional [(1)] | 5,059 | $31 | March 2012 |
| Omaha, Nebraska | Multi Functional [(1)] | 18,265 | $188 | July 2012 |
| Paris, France | Multi Functional [(1)] | 4,753 | $104 | January 2014 |
| Gaithersburg, Maryland | Multi Functional [(1)] | 8,404 | $145 | May 2012 |

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

The leases on the Cramlington, England facility will expire in March 2008, and we will be vacating the property at that time. We have vacated the Paris, France facility and are in the process of finding a tenant to sublease this facility.

**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 the Registrant s Common Stock, Related Stockholder Matters and Issuer Repurchases 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 2006 and 2007.

| | High | Low |
|---|---|---|
| **Year Ended December 31, 2006** | | |
| First Quarter | $ 1.03 | $ 0.62 |
| Second Quarter | $ 0.84 | $ 0.39 |
| Third Quarter | $ .77 | $ 0.31 |
| Fourth Quarter | $ .89 | $ 0.40 |
| **Year Ended December 31, 2007** | | |
| First Quarter | $ .80 | $ .42 |
| Second Quarter | $ .88 | $ .61 |
| Third Quarter | $ .75 | $ .49 |
| Fourth Quarter | $ .72 | $ .41 |

*Holders.* At December 31, 2007, there are 49,189,672 shares of our common stock outstanding and approximately 3,310 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, 2007 and 2006 that were not registered under the Securities Act of 1933 (the Securities Act ). Information regarding sales of equity securities by the Company during the years 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, 2007. 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, 2007 and 2006 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 included elsewhere in this Annual Report on Form 10-K. The selected consolidated balance sheet data as of December 31, 2005, 2004 and 2003 and the selected consolidated statements of operations data for each year ended December 31, 2004 and 2003 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, | | | | |
|---|---|---|---|---|---|
| | 2007 | 2006 | 2005 | 2004 | 2003 |
| **Statement of Operations Data:** | | | | | |
| Net sales | $ 23,176 | $ 23,415 | $ 25,828 | $ 25,243 | $ 26,044 |
| Cost of good sold | 10,483 | 12,046 | 13,497 | 11,997 | 11,374 |
| Gross profit | 12,693 | 11,369 | 12,331 | 13,246 | 14,670 |
| Selling, general and administrative | 11,466 | 12,138 | 12,218 | 15,961 | 16,586 |
| Research and development | 3,033 | 2,362 | 2,199 | 4,501 | 6,834 |
| Restructuring charges [1] | 1,516 | | | 1,267 | 516 |
| Impairment charges [2] | | | 425 | | |
| Operating expenses | 16,015 | 14,500 | 14,842 | 21,729 | 23,936 |
| Other income (expense) [3] | 1,391 | 198 | (2,447) | (5,263) | (181) |
| Loss before income taxes | (1,931) | (2,933) | (4,958) | (13,746) | (9,447) |
| Income tax expense | 243 | 30 | 26 | 4 | 65 |
| Loss from continuing operations | (2,174) | (2,963) | (4,984) | (13,750) | (9,512) |
| (Loss) income from discontinued operations, net of tax [4] | 67 | (468) | (10,009) | (20,622) | (13,446) |
| Net loss | $ (2,107) | $ (3,431) | $ (14,993) | $ (34,372) | $ (22,958) |
| Basic and diluted (loss) income per share: [4] | | | | | |
| From continuing operations | $ (0.04) | $ (0.06) | $ (0.14) | $ (0.47) | $ (0.39) |
| From discontinued operations [4] | (0.00) | (0.01) | (0.28) | (0.72) | (0.55) |
| | $ (0.04) | $ (0.07) | $ (0.42) | $ (1.19) | $ (0.94) |
| Basic and diluted weighted average shares outstanding | 49,190 | 49,188 | 35,688 | 29,006 | 24,484 |

| | As of December 31, | | | | |
|---|---|---|---|---|---|
| | 2007 | 2006 | 2005 | 2004 | 2003 |
| **Balance Sheet Data:** | | | | | |
| Total assets | $ 19,090 | $ 21,367 | $ 25,340 | $ 37,458 | $ 57,306 |
| Borrowings under credit line [5] | | | | 6,514 | 2,142 |
| Current portion of long-term debt [5] | | | | 825 | 1,693 |
| Long-term debt, less current portion [5] | | | | 2,199 | |
| Total stockholders equity | 14,102 | 16,038 | 17,906 | 16,535 | 45,058 |

(1) Restructuring plans were implemented in 2007 and 2004 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 D to the accompanying consolidated financial

statements.

(2) Impairment charges in 2005 relate to the impairment of patent pursuits and write-down of inventory to net realizable value. Refer to Notes to the accompanying consolidated financial statements.

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(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.

(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. Refer to Note C to the accompanying consolidated financial statements.

(5) The Laurus Loans were repaid during 2005 resulting in a loss on debt extinguishment of $.5 million.

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

The following discussion should be read in conjunction with the Consolidated Financial Statements and applicable Notes to Consolidated Financial Statements and other information in this report, including Risk Factors set forth in Item 1A and Critical Accounting Policies at the end of this Item 7.

Our continuing operations consist of the manufacture and sale of our WAVE System and related consumable products and discovery services which make use of the Company s WAVE System to perform genomic research on a contract basis and disease testing services. These functions are categorized as one reportable operating segment. Although revenue is analyzed by type, the Company s net financial results are analyzed as a single segment due to the integrated nature of the products and services that we sell. The Consolidated Financial Statements also reflect the assets and results of our former Nucleic Acids operating segment, which are shown as discontinued operations in all periods as a result of the implementation of a plan to exit this operating segment in the fourth quarter of 2005.

**Executive Summary**

**2007 Results**

Full year revenue for 2007 of $23.2 million was consistent with total revenue for 2006 of $23.4 million. Our instrument business declined in 2007 due to fewer WAVE system sales. The bioconsumable business had a slight increase of 2% from 2006 to 2007. The growth in our discovery services was 149% over the prior year. These revenues, coupled with our recently completed cost reduction efforts enabled us to achieve a profit in the fourth quarter of 2007 of $.2 million. The pharmacogenomics business increased from the third quarter of 2007 to the fourth quarter of 2007 by $.4 million. We believe this is due to our increased focus on pharmaceutical companies that we initiated at the beginning of 2007.

Although we have taken significant steps to reduce our operating expenses, we continued to operate at a loss and to generate a negative cash flow during the year. However, our loss and use of cash were reduced over each of the last three years. Our losses from continuing operations have gone from $5.0 million and $3.0 million in 2005 and 2006, respectively, to $2.2 million in 2007. We were able to maintain our cash level of $5.7 million, avoid new debt and improve our gross margins.

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**2008 Outlook**

We are forecasting revenue growth of 10-15% over 2007 and to be profitable in 2008. To accomplish these goals we must generate sequential growth in net sales and continue to better control operating expenses. We are investing in all parts of our business to drive improved sales in 2008 and have added experienced sales staff. We have worked hard to develop a significant number of exciting collaboration opportunities. In addition, we have strengthened our Board of Directors, added key senior management and formed a Scientific Advisory Board to advise us on the latest developments and scientific opportunities in cancer detection screening and mitochondrial disease diagnosis.

*Develop sequential growth in net sales.*

We will work to continue to leverage on and strengthen our core instrument business. Challenges exist for WAVE System and consumable growth in traditional markets. We continue to look for emerging markets and novel applications to provide us with new opportunities for our WAVE System. We intend to continue to diversify into new markets, including the personalized medicine market (particularly in oncology), where the sensitivities of our technologies are essential. In the short-term, we believe that the introduction of the newest generation of our flagship product, the WAVE System 4500 will provide upgrade opportunities to our current installed base. 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. In the intermediate to longer-term, we believe that newly developed targeted consumable products will increase usability of our installed base and enhance net sales of consumables. 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 discovery services front, we have hired two new business development directors to develop pharmaceutical and clinical research organization customers. We have entered into agreements with two major pharmaceutical companies for three Phase II trials representing more than $.5 million of revenues in the first half of 2008 and are focused on maintaining this momentum in our pharmacogenomics business. To compliment our mutation detection expertise, we also have strong capabilities in biomarker development and mutation detection in cancer pathway genes which will aid in the development of true personalized medicine for our pharmaceutical partners. We have also focused increased efforts to expand our Molecular Clinical Reference Laboratory sales by hiring three experienced sales representatives.

*Continue to control operating expenses.*

Operating expenses include selling, general and administrative expenses and research and development expenses. We will need to continue to invest in research and development activities in order to remain competitive and to take advantage of new business opportunities as they arise. During 2008, we expect operating expenses, including research and development expense, to be approximately equal to 2007 levels.

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**Results of Continuing Operations**

**Years Ended December 31, 2007 and 2006**

*Net Sales.* Net sales for the years ended December 31, 2007 and 2006 consisted of the following (dollars in thousands):

| | | | Change | |
|---|---|---|---|---|
| | 2007 | 2006 | $ | % |
| Bioinstruments | $ 11,551 | $ 13,604 | $ (2,053) | (15)% |
| Bioconsumables | 8,901 | 8,719 | 182 | 2% |
| Discovery Services | 2,724 | 1,092 | 1,632 | 149% |
| Net sales | $ 23,176 | $ 23,415 | $ 239 | (1)% |

Bioinstrument sales consist of sales of our WAVE System and associated equipment that we manufacture or assemble, revenues 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. We sold 56 WAVE Systems during the year ended December 31, 2007 compared to 68 systems during the same period of 2006. This decrease resulted from lower demand in all major geographic markets and among both research and diagnostic users particularly in our largest markets throughout Western Europe. Demand for WAVE systems has been affected by significant competitive challenges from traditional (i.e. sequencing) and evolving technologies. In addition, there were decreased net sales from product upgrades.

Bioconsumable net sales increased during the year ended December 31, 2007 compared to 2006. The installed base of WAVE instruments increased from 1,358 units at December 31, 2006 to 1,414 units at December 31, 2007, which is an increase of 4%. However, consumable usage increased by just 2%. We believe that this is reflective of the fact that not all of the installed instruments are being fully utilized. In addition, consumable products are available from other manufacturers which can be used in place of many of our consumable products. Some of these competitive products sell at prices below the prices we charge for our products, which have caused us to have some price compression, principally in Europe

Discovery Services net sales increased during the year ended December 31, 2007 compared to 2006 by approximately $1.6 million. Discovery Services sales includes both the Molecular Clinical Reference Laboratory and the Pharmocogenomics Research Services. The Molecular Clinical Reference Laboratory net sales of $1.7 million increased 300% over the year ended December 31, 2006. The increased revenue is attributable to new customers with one of the new customers representing approximately 50% of the 2007 revenue. The Pharmacogenomics Research Services net sales of $1.1 million increased 47% over the year ended December 31, 2006. Revenue in the fourth quarter of 2007 was $.6 million for the Pharacogenomics Research Services which represents approximately 50% of the annual revenue. This is due to the completion of 13 projects for 5 pharmaceutical partners during the fourth quarter of 2007.

*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,

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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, rent, supplies and depreciation) associated with our discovery services operations. Cost of goods sold for the years ended December 31, 2007 and 2006 consisted of the following (dollars in thousands):

| | | | Change | |
|---|---|---|---|---|
| | 2007 | 2006 | $ | % |
| Bioinstruments | $ 4,318 | $ 5,745 | $ (1,427) | (25)% |
| Bioconsumables | 4,054 | 4,530 | (476) | (11)% |
| Discovery Services | 2,111 | 1,771 | 340 | 19% |
| Cost of goods sold | $ 10,483 | $ 12,046 | $ (1,563) | (13)% |

Gross profit equaled $12.7 million or 55% of total net sales during the year ended December 31, 2007 compared to $11.4 million and 49% during the same period of 2006. The increase in gross profit as a percent of revenue is largely attributable to changes in the composition of products sold. Margins on bioinstruments improved from 58% to 63% from 2006 to 2007 due to the change in the mix of instruments sold. We were also able to improve margins on bioconsumables from 48% in 2006 to 54% in 2007 due our focus on cost containment. The discovery services group improved margins for the year ended December 31, 2007 to 22% as compared to a negative 62% for the year ended December 31, 2006 due primarily to being able to leverage a fixed cost structure with increased sales revenue.

*Selling, General and Administrative Expenses.* Selling, general and administrative expenses primarily include personnel costs, marketing, travel and entertainment costs, professional fees, and facility costs. These costs decreased in 2007 compared to 2006, and decreased as a percentage of net sales from 52% to 49%. These reductions were primarily due to lower personnel costs and facilities costs resulting from our restructuring plan. In addition, foreign currency transaction adjustments decreased operating expenses by approximately $.1 million for the year ended December 31, 2007 compared to 2006.

*Research and Development Expenses.* Research and development expenses primarily include personnel costs, legal fees, supplies, and facility costs. These costs totaled $3.0 million during the year ended December 31, 2007 compared to $2.4 million during the same period of 2006, an increase of $0.7 million or 28%. As a percentage of net sales, research and development expenses totaled 13% and 10% of net sales during the year ended December 31, 2007 and 2006 respectively. We expect to continue to invest approximately 10% of our net sales in research and development activities. Research and development costs are expensed in the year in which they are incurred.

*Restructuring Charges.* We recorded restructuring charges totaling $1.5 million during 2007. The restructuring charges were comprised of severance payments totaling $.9 million, facility closure costs totaling $.5 million and other costs totaling $.1 million. Restructuring charges related to three events: A restructuring plan completed in the second quarter of 2007, which resulted in the termination of four employees in Omaha, Nebraska; the closure of the Cramlington, England bioconsumable production facility and consolidation of this production in the Omaha, Nebraska facility; and the closure of an administrative office outside Paris, France and combining those operations with those functions performed elsewhere in the organization. We substantially completed these restructuring activities as of December 31, 2007. These restructuring charges do not relate to any activities taken by

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us during 2007 or prior periods in connection with the termination of our Nucleic Acids business segment. All costs associated with these activities are included in income (loss) from discontinued operations.

*Other Income (Expense).* Other income during the year ended December 31, 2007 of $1.4 million represented an increase of $1.2 million from 2006. The increase was attributable to the sale of an investment in equity securities. On May 10, 2007, we sold 250,000 shares of stock in Pinnacle Pharmaceuticals, Inc. which we acquired in connection with a prior business acquisition. Gross proceeds realized from the sale were $.9 million and because our carrying cost in this stock was $0, the sale resulted in a gain of $.9 million. Other income also includes $.2 million in insurance proceeds related to equipment destroyed in the fire at our Cramlington facility. In addition we received $.3 million of interest income from cash and cash equivalents invested in overnight instruments. Other income was offset by a nominal amount of interest expense in both 2007 and 2006.

*Income Tax Expense.* Income tax expense recorded during the years ended December 31, 2007 and 2006 related to income taxes in states, foreign countries and other local jurisdictions. Due to the our cumulative losses and inability to utilize any additional losses as carrybacks, we did not provide for an income tax benefit during the years ended December 31, 2007 or 2006 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 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 $109.2 million will expire at various dates from 2008 through 2027, if not utilized. We also had state income tax loss carryforwards from continuing and discontinued operations of $40.7 million at December 31, 2007. These carryforwards will also expire at various dates if not utilized.

**Years Ended December 31, 2006 and 2005**

*Net Sales.* Net sales for the years ended December 31, 2006 and 2005 consisted of the following (dollars in thousands):

| | | | Change | |
|---|---|---|---|---|
| | **2006** | **2005** | **$** | **%** |
| Bioinstruments | $ 13,604 | $ 14,427 | $ (823) | (6)% |
| Bioconsumables | 8,719 | 8,981 | (262) | (3)% |
| Discovery Services | 1,092 | 2,420 | (1,328) | (55)% |
| Net sales | $ 23,415 | $ 25,828 | $ (2,413) | (9)% |

WAVE Systems sold totaled 68 during the year ended December 31, 2006 compared to 97 during the same period of 2005. The increase in the installed base of instruments continued to drive increases in sales of bioconsumables used with these instruments. The decrease in discovery services net sales was primarily attributable to the expiration of certain research contracts with a large pharmaceutical company in 2005.

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*Costs of Goods Sold.* Cost of goods sold for the years ended December 31, 2006 and 2005 consisted of the following (dollars in thousands):

| | 2006 | 2005 | Change $ | Change % |
|---|---|---|---|---|
| Bioinstruments | $ 5,745 | $ 6,442 | $ (697) | (11)% |
| Bioconsumables | 4,530 | 4,762 | (232) | (5)% |
| Discovery Services | 1,771 | 2,293 | (522) | (23)% |
| Cost of goods sold | $ 12,046 | $ 13,497 | $ (1,451) | (11)% |

Gross profit equaled $11.3 million or 49% of total net sales during the year ended December 31, 2006 compared to $12.3 million and 48% during the same period of 2005. The increase in gross profit as a percent of revenue is largely attributable to changes in the composition of products sold. Sales of OEM instruments provided for higher gross profit in 2006, while gross profit on WAVE sales was down, due to the lower number of instruments sold and the fixed base of cost associated with this area. Gross profit from discovery services was significantly less in 2006 due to the decrease in net sales to a large pharmaceutical customer which produced net sales of $2.1 million in 2005.

*Selling, General and Administrative Expenses.* Selling, general and administrative expenses primarily include personnel costs, marketing, travel and entertainment costs, professional fees, and facility costs. These costs remained essentially flat in 2006 compared to 2005, but increased as a percentage of net sales from 47% to 52% as a result of reduced sales. Foreign currency transaction adjustments increased operating expenses by approximately $.08 million compared to the year ended December 31, 2005

*Research and Development Expenses.* Research and development expenses primarily include personnel costs, supplies, and facility costs. These costs totaled $2.4 million during the year ended December 31, 2006 compared to $2.2 million during the same period of 2005, an increase of $0.2 million or 7%. As a percentage of net sales, research and development expenses totaled 10% and 9% of net sales during the years ended December 31, 2006 and 2005 respectively. We expect to continue to invest up to 10% of our net sales in research and development activities. Research and development costs are expensed in the year in which they are incurred.

*Impairment Charges*. We did not record any charges in 2006 for impairment of goodwill or long lived assets subject to annual evaluations of impairment. However, impairment charges totaled $0.4 million during the year ended December 31, 2005 and consisted of $0.2 million associated with certain international patent pursuits that were no longer consistent with our strategic plan and $0.2 million related to certain inventory associated with third party platforms.

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*Other Income (Expense).* Other income during the year ended December 31, 2006 of $0.2 million consisted of interest income. Other expense during the year ended December 31, 2005 consisted of interest expense of $2.0 million and a loss on debt extinguishment of $0.5 million which was partially offset by interest income of $0.1 and other income of $0.1 million. Interest expense consisted of the following for the years ended December 31, 2006 and 2005 (dollars in thousands):

| | 2006 | 2005 |
|---|---|---|
| Interest paid or accrued on outstanding debt | $ | $ 553 |
| Amortization of debt premiums | | (857) |
| Amortization of debt discounts warrants | | 28 |
| Amortization of debt discount beneficial conversion feature | | 725 |
| Fair value of incremental shares received by Laurus | | 1,365 |
| Other | 11 | 164 |
| | $ 11 | $ 1,978 |

We had previously entered into a $7.5 million line of credit (the Credit Line ) and a $2.8 million convertible note (the Term Note, and collectively with the Credit Line the Laurus Loans ) from Laurus Master Fund, Ltd. ( Laurus ). On March 18, 2005, Laurus converted $1.9 million of the outstanding principal balance under the Credit Line into 3,600,000 shares of our common stock at $0.52 per share. In addition, on March 24, 2005, Laurus converted $.7 million of the outstanding principal balance of the Term Note into 1,250,000 shares of our common stock at $0.52 per share. In conjunction with these conversions, we accelerated amortization of $.4 million of related debt premiums and discounts and recorded a charge to interest expense of $1.4 million related to the fair value of incremental shares received by Laurus. Contemporaneously with the closing of a private offering of common stock in November 2005 (the 2005 Private Placement ), we repaid all outstanding principal and accrued interest on the Laurus Loans. In conjunction with this prepayment, we recorded a loss on debt extinguishment of $.5 million. This loss consisted of prepayment penalties and fees paid to Laurus to facilitate the 2005 Private Placement of $.8 million offset by the elimination of associated net debt premiums of $.3 million.

*Income Tax Expense.* Income tax expense recorded during the years ended December 31, 2006 and 2005 related to income taxes in states, foreign countries and other local jurisdictions. Due to our cumulative losses, expected losses in future years and inability to utilize any additional losses as carrybacks, we did not provide for an income tax benefit during the years ended December 31, 2006 or 2005 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 required, the tax benefit of the remaining deferred tax assets will be recognized at such time.

**Results of Discontinued Operations**

On December 22, 2005, the Company s Directors voted to either sell or close and liquidate the Nucleic Acids operating segment, which consists primarily of a manufacturing facility in Glasgow, Scotland. This decision was made after an evaluation of, among other things, short and long-term sales projections for products sold by this operating segment, including estimates of 2006 sales to the operating segment s largest customer. In conjunction with the decision to exit this operating segment,

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the Company recorded impairment charges of $.4 million and $8.0 million in 2006 and 2005, respectively, consisting of valuation adjustments to reflect the carrying value of the related net assets at estimated fair market value. Accordingly, the results of this business segment are shown as discontinued operations for all periods presented. Expenses that are not directly identified to this operating segment or are considered corporate overhead have not been allocated to this segment in determining the results from discontinued operations. Summary results of operations of the former Nucleic Acids operating segment were as follows (dollars in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2007 | 2006 | 2005 |
| **NET SALES** | $ | $ 1,142 | $ 3,881 |
| **COST OF GOODS SOLD** | | 912 | 4,004 |
| Gross profit (loss) | | 230 | (123) |
| **OPERATING EXPENSES:** | | | |
| Selling, general and administrative | (67) | 264 | 1,054 |
| Research and development | | | |
| Restructuring charges | | | |
| Exit and disposal charges | | | 866 |
| Impairment charges | | 436 | 8,022 |
| Gain on sale of facility | | | |
| | (67) | 700 | 9,942 |
| **INCOME (LOSS) FROM OPERATIONS** | 67 | (470) | (10,065) |
| **OTHER INCOME (EXPENSE)** | | 2 | 56 |
| **INCOME (LOSS) BEFORE INCOME TAXES** | 67 | (468) | (10,009) |
| **INCOME TAX BENEFIT** | | | |
| **INCOME (LOSS) FROM DISCONTINUED OPERATIONS** | $ 67 | $ (468) | |