TRANSGENOMIC INC
Form 10-K/A
May 27, 2005
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A-2

(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, 2004

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 (State or Other Jurisdiction of Incorporation or Organization)	91-1789357 (IRS Employer Identification Number)
12325 Emmet Street Omaha, NE 68164 (Address of Principal Executive Offices)	68164 (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 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 x

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes ¨ No x

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant based on the last reported closing price per share of Common Stock as reported on The Nasdaq National Market on the last business day of the registrant s most recently completed second fiscal quarter was approximately $38.37 million.

As of April 14, 2005, the registrant had 34,234,922 shares of Common Stock outstanding.

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Explanatory Note

We are amending our annual report on Form 10-K for the fiscal year ended December 31, 2004 (Form 10-K) for certain adjustments that are required to appropriately report cash flows from operating and investing activities in the audited consolidated statements of cash flows included in Part II, Item 8 herein and related cash flow disclosures included in Part II, Item 7. These restatements are discussed in Note P to the consolidated financial statements and result only in a reclassification of certain items within the audited consolidated statement of cash flows. They have no effect on the net change in cash and cash equivalents for any period reported or any other line item in the audited consolidated financial statements. Except as indicated, we have made no other changes to our Form 10-K.

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This annual report on Form 10-K/A 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, 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/A are the property of their respective owners.

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Item 1. Business

We provide innovative products and services for the synthesis, purification and analysis of nucleic acids. Our operations fall into two principal business units, BioSystems and Nucleic Acids. Our BioSystems products include our WAVE® automated instrument systems, WAVE associated consumable products and other related consumable products. Our Nucleic Acids products consist principally of chemical building blocks for nucleic acid synthesis. Both business units have service offerings as well, including genetic variation discovery and analysis services and custom synthesis of specialty nucleic acids.

Our technologies center around three core competencies: separation chemistries, enzymology, and nucleic acid chemistries. We employ novel chemistries for separating nucleic acids, proteins, peptides, amino acids and carbohydrates. Our most significant separation technology is currently embodied in the WAVE System. The WAVE System is a versatile instrument that can be used for genetic variation detection, size-based double-strand DNA separation and analysis, single-strand DNA separation and analysis and DNA purification. The WAVE System requires the use of various consumable products that we manufacture and sell separately.

Our second core competency is expertise in developing novel enzymes. Enzymes are proteins that act as catalysts for biochemical reactions. Several of these reactions are useful in genomics. The ability to develop enzymes useful in the experimental manipulation of genes provides powerful tools for producing genetic material in the form needed for further analysis or incorporation into diagnostics and therapeutics. These products can also expand the sale of consumable products to WAVE System users and may also be sold for other applications. Our SURVEYOR® product line of mutation detection kits allow for the cleaving of DNA at points where DNA sequence variations exists. The resulting DNA fragments can then be analyzed by our WAVE System, fluorescent capillary electrophoresis or standard gel electrophoresis. SURVEYOR Kits provide a simple and robust method of scanning relatively large DNA fragments for both known and novel sequence variations.

Our third core competency is nucleic acid chemistries. Our synthetic nucleic acid products consist of chemical building blocks of nucleic acids (known as phosphoramidites). We also manufacture related specialty chemicals such as fluorescent markers and molecular tags, dyes, quenchers, linkers, and solvents used to modify nucleic acids for subsequent detection or manipulation. These products are used by research organizations, diagnostic companies and pharmaceutical companies. These products are produced primarily in our Glasgow, Scotland facility. Prior to November 11, 2004, we had also manufactured synthesized segments of nucleic acids (known as oligonucleotides) in a facility in Boulder, Colorado. On November 11, 2004, we sold the assets associated with this facility to a subsidiary of Eyetech Pharmaceuticals, Inc. (Eyetech). As a result of this sale, we no longer manufacture and sell these specialized oligonucleotides.

Our operations are managed based upon the nature of the products and services provided. Accordingly, we operate in two reportable segments, BioSystems and Nucleic Acids. Operations for these segments are evaluated based upon specific identification of revenues and expenses associated with the business activities resulting in a segment operating income or loss. See Note K to the accompanying consolidated financial statements for detailed segment information.

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 genetics. The movement in the field of genomics, and related market opportunities, has shifted from gene discovery to the analysis of variations in gene sequences. Researchers are beginning to link variations in the gene sequences to disorders and diseases. Accordingly, a principal component of our strategy has been to establish our WAVE System as the

industry standard in the genetic research market and to develop additional markets for the WAVE System such as diagnostics. Through an expanding base of installed systems, we expect to increase the sales of consumable products used with the WAVE.

We have also historically sought to position ourselves as a partner to biopharmaceutical and pharmaceutical companies in the early stages of their efforts to develop genomic-based diagnostics and therapeutics, thereby allowing us to participate in future successes of products derived from the expanding knowledge of genomics. While we continue to believe that the long-term prospects for this business segment are favorable, we concluded that near-term revenues from this segment would generate neither positive cash flows nor profits from operations. Consequently, in the second quarter of 2004, our Board of Directors directed management to explore strategic alternatives for our Nucleic Acids operating segment, including the possible sale of one or both of the facilities in Glasgow, Scotland and Boulder, Colorado. On November 11, 2004, we sold the assets associated with our specialty oligonucleotide manufacturing facility in Boulder, Colorado. We continue to operate our facility in Glasgow, Scotland which primarily produces chemical building blocks used in the synthesis of nucleic acids. However, we have taken steps to consolidate these operations and to reduce costs in order to better align operating expenses with anticipated revenues.

Our business strategy going forward is to achieve revenue growth in our BioSystems operating segment and to better align our cost structure with anticipated revenues in both of our operating segments. We have already taken steps to implement this strategy as more fully discussed under Significant 2004 Developments, below.

Significant 2004 Developments

We determined that our Nucleic Acids operating segment was impaired and sold our specialty oligonucleotides manufacturing facility.

Based upon information obtained through the process of evaluating strategic alternatives for our Nucleic Acids segment, we determined that it was more likely than not that the value of the assets associated with this business were impaired. We engaged an external valuation firm to assist us in conducting an interim period impairment test that resulted in a non-cash charge of $11.97 million related to these assets during the three months ended June 30, 2004. The charge consisted of $9.87 million related to the impairment of goodwill and $2.10 million related to the impairment of property and equipment.

On November 11, 2004, we sold the assets associated with our specialty oligonucleotides manufacturing facility in Boulder, Colorado to Eyetech. The sale price was $3.00 million in cash plus the assumption of the lease on the Boulder facility and of certain equipment leases with a gross value of $2.38 million. Substantially all of the 27 employees at the Boulder facility became Eyetech employees. Net proceeds from the sale (after transaction expenses and fees paid to our investment advisors) equaled approximately $2.70 million. In conjunction with this transaction, we recorded a gain on sale of $1.47 million in the fourth quarter of 2004.

We implemented a restructuring plan to better align costs with expected revenues.

On November 13, 2004, our Board of Directors approved a restructuring plan designed to refocus the Company on its BioSystems operating segment and to better align our cost structure with anticipated revenues. The plan (which is incremental to the sale of our Boulder, Colorado facility) included a workforce reduction of approximately 60 positions and the closure of two domestic research and development facilities associated with our Nucleic Acids operating segment and two European field offices. Additionally, we eliminated approximately 10 positions at our chemical building blocks manufacturing facility in Glasgow, Scotland. In conjunction with these changes, we incurred a charge of $3.57 million during the quarter ended December 31, 2004 related primarily to severance, benefits and facility closures.

Together, the sale of our specialty oligonucleotide manufacturing facility and the implementation of our restructuring plan are expected to result in $10.0 million to $12.00 million in annual cost savings.

We revised our credit facilities with Laurus Master Funds, Ltd.

We have entered into a $7.50 million convertible line of credit (the Credit Line) and a separate $2.75 million convertible note (the Term Note) with Laurus Master Fund, Ltd. (Laurus)(collectively, the Laurus Loans). In February 2004, Laurus waived the borrowing base limitation on the Credit Line, thereby making the full $7.50 million facility available to the Company regardless of the available collateral. On August 31, 2004, Laurus agreed to extend the borrowing base waiver on the Credit Line through March 19, 2005. In addition, Laurus has deferred certain payments due under the Term Note and reduced the interest rate on both of the Laurus Loans to 0% for any day the closing sale price of the Company s common stock is at or above $1.75 per share. In return, we lowered the conversion price on each of the Laurus Loans to $1.00 per share and issued a warrant to Laurus covering an additional 400,000 common shares at an exercise price of $1.25 per share. The closing price of the Company s common stock on August 31, 2004 was $1.20 per share.

Subsequent to December 31, 2004, we further amended our Credit Line. On March 18, 2005, Laurus agreed to extend the borrowing base waiver on the Credit Line through March 31, 2006. In addition, we agreed to allow Laurus to convert $1.87 million of the outstanding principal balance under the Credit Line into 3,600,000 shares of common stock on March 18, 2005 and $0.65 million of the outstanding principal balance of the Term Note into 1,250,000 shares of common stock on March 24, 2005. As a result, we have increased the amount available under the Credit Line by $1.87 million and have eliminated substantially all remaining 2005 scheduled principal payments on the Term Loan.

Sales and Marketing

We currently sell our products to customers in over 30 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 currently have over 25 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.

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.

During 2004, sales to Geron Corporation totaled $4.15 million and represented 12% of total consolidated net sales and 49% of total net sales within our Nucleic Acids operating segment. We do not have a long-term sales agreement with Geron Corporation and, accordingly, the amount of nucleic acid products we sell to it is subject to change. Revenues from our Nucl eic Acids business would be substantially reduced if Geron Corporation s need for our products declined or if it decided to obtain these products from other suppliers.

No other customer currently accounts for more than 10% of total consolidated or operating segment net sales.

Research and Development

We maintain an active program of research and development and expect to continue to incur significant expense for these activities going forward. Our research and development activities 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, to a lesser extent, the improvement of chemical and biochemical reaction techniques for synthetic nucleic acids.

Consistent with our business strategy discussed above, we have taken steps to reduce research and development expenditures to levels that are more consistent with our current levels of revenue. For 2004,

our research and development expenditures were approximately $6.69 million. This represents a substantial reduction from our prior levels of expenditures that were $9.31 million, $12.20 million and $9.37 million in 2003, 2002 and 2001, respectively. We expect that we will further curtail our research and development activities until we are able to increase our revenues or otherwise improve our liquidity and working capital positions.

Manufacturing

We manufacture bioconsumable products including our separation columns, liquid reagents, enzymes and nucleic acid products. 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, San Jose, California, and Cramlington, England. Our phosphoramidites and related synthetic nucleic acid products are manufactured in our Glasgow, Scotland facility.

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 more than 80 issued patents and 50 pending applications in both the U.S. and abroad. Our BioSystems operating segment products, comprising the WAVE ® System and related consumables, are protected by patents and in-licensed technologies with remaining lives of 9 to 18 years. Intellectual property related to our Synthetic Nucleic Acid business unit, other than production trade secrets, is almost entirely in-licensed. A number of these in-licensed patents have recently, or will soon, expire. As a result, we expect price competition in the Nucleic Acids operating segment to intensify in the next year. 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 our Biosystems operating segment operates are highly competitive, and characterized by rapidly changing technological advances. A number of Transgenomic s 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. Transgenomic competes 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, Beckman Coulter, Amersham (now part of GE Healthcare), Affymetrix, Agilent Technologies, Nanogen, Illumina, Sequenom, Pyrosequencing (now part of Biotage AB), Varian, 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 unit faces competition from a number of companies offering contract DNA sequencing and other genomic analysis services, including Genaissance Pharmaceuticals, GeneLogic, Agencourt, SeqWright, Gentris, and Perlagen. In addition, several clinical diagnostics service providers, such as Labcorp, Quest, and Specialty Laboratories, also offer related laboratory services in support of clinical trials. Finally, additional competition arises from academic core laboratory facilities.

Competition is also intense in the markets in which our Nucleic Acids operating segment functions, and increasingly driven by price. Transgenomic competes on the basis of its ability to develop and manufacture synthetic nucleic acid building blocks used to make DNA and RNA oligonucleotides. Competitors include Proligo Degussa, Pierce Nucleic Acid Technologies, and Applied Byosystems. In addition, competition is expected in the future from new overseas entrants focusing on low cost production.

Employees

As of December 31, 2004 and 2003, we had 178 and 244 employees, respectively. Certain of those employees at December 31, 2004 were terminated during January and February 2005 in connection with the 2004 restructuring plan. As of February 28, 2005, we had 157 employees and expect our headcount to be relatively stable throughout the remainder of 2005. These employees are focused in the following areas of our operation:

	February 28, 2005	December 31, 2004	December 31, 2003
BioSysytems Operating Segment			
Manufacturing	50	52	54
Sales, Marketing and Administration	68	75	90
Research and Development	18	19	31
	136	146	175
Nucleic Acids Operating Segment			
Manufacturing	16	20	45
Sales, Marketing and Administration	5	6	8
Research and Development	0	6	16
	21	32	69
	157	178	244

We supplement our workforce through the use of independent contractors and consultants. As of February 28, 2005 and December 31, 2004, we have engaged independent contractors or consultants who provide services to us approximately equivalent to five and four full-time employees, respectively.

Our employees were employed in the following geographical locations.

	February 28, 2005	December 31, 2004	December 31, 2003
United States	93	106	166
Europe (other than the United Kingdom)	20	22	20
United Kingdom	44	50	58
	157	178	244

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, San Jose, California, Glasgow, Scotland and Cramlington, England. We maintain research and development offices in Gaithersburg, Maryland and Omaha, Nebraska.

Our Internet address is *www.transgenomic.com*. We make our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports available free of charge through our website as soon as reasonably practicable after we file these documents with the Securities and Exchange Commission.

Risks Related to Our Business

We may not have adequate financial resources to execute our business plan and may be need to terminate some operations.

We have experienced net losses and had an accumulated deficit of $107,101 at December 31, 2004. As of March 31, 2005, we had cash and cash equivalents of $1.37 million plus an additional $2.29 million available under our Credit Line. Based on our 2005 operating plan, we believe existing sources of liquidity will be sufficient to meet cash needs during 2005. If necessary, we believe we can manage costs and expenses at reduced levels to conserve working capital. The need for any such cost and expense reductions during 2005 would likely delay implementation of our business plan. Additionally, we may pursue additional financing alternatives. Ultimately, we must achieve sufficient revenue levels to support its cost structure.

Not withstanding our beliefs, there is no assurance that we will be able to achieve all of these steps or that any of these steps will allow us to meet our cash needs. Accordingly, our existing cash balances, cash generated by operations, and available borrowings under the Credit Line may be insufficient to satisfy our liquidity requirements if our operating plan is not met. In addition, there is no assurance that we will be able to obtain additional debt or equity financing to meet future cash needs. If we are not able to meet our needs for working capital, we may not be able to execute parts or all of our business plan and may need to discontinue operations in one or both of our operating segments.

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

We have experienced losses from operations since inception of our operations. Our operating losses for each of the last three fiscal years were $29.06 million, $22.59 million and $21.70 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, restructuring charges and impairment charges. In addition, markets for our products 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, and we may never be profitable.

We may issue a substantial amount of our stock in conversion of our debt and exercise of options and warrants and this could reduce the market price for our stock.

As of April 14, 2005, we had outstanding 34,234,922 million shares of common stock. We also had obligations to issue approximately 6.2 million shares of common stock under outstanding stock options and warrants. Additionally, we may issue shares of common stock upon conversion of all or part of the Laurus Loans. Currently, Laurus may acquire 2.8 million shares of our common stock upon conversion of this debt. The issuance of such additional shares of common stock may be dilutive to our current shareholders and could negatively impact the market price of our common stock.

Markets for our products and services may develop slowly.

There are many factors that affect the market demand for our products and services that we cannot control. This is especially true in our Nucleic Acids operating segment where the demand for our products depends to a large degree on the success that our customers and potential customers have in developing useful pharmaceutical products based on genetic intervention. A central strategy for our Nucleic Acids operating segment is to sell synthetic nucleic acid products to biopharmaceutical and pharmaceutical companies that are seeking to develop commercially viable genomic-based diagnostic and therapeutic products. We have invested a significant amount of capital into acquiring and developing manufacturing facilities and other assets to allow us to pursue this market. However, this is a new field of commercial development, and many of these biopharmaceutical and pharmaceutical companies are in the early stages of their efforts to develop genomic-based diagnostics and therapeutics and have encountered difficulties in these efforts. As a result, the demand for our synthetic nucleic acid products is difficult to forecast and may develop slowly or sporadically. In addition, we cannot assure you that these companies will not internally develop the chemistries and manufacturing capabilities to produce the products they could buy from us. Demand for our WAVE System is similarly 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.

A single customer accounts for a significant portion of consolidated net sales and net sales in our Nucleic Acids operating segment.

During 2004, sales to Geron Corporation totaled $4.15 million and represented 12% of total consolidated net sales and 49% of total net sales within our Nucleic Acids operating segment. We do not have a long-term sales agreement with Geron Corporation and, accordingly, the amount of nucleic acid products we sell to it is subject to change. Revenues from our Nucleic Acids operating segment business would be substantially reduced if Geron Corporation s need for our products declined or if it decided to obtain these products from other suppliers.

No other customer currently accounts for more than 10% of total consolidated or operating segment net sales.

Customer clinical trials may be delayed or discontinued.

A significant percentage of our Nucleic Acids operating segment and Discovery Services revenues are generated by sales to customers involved in drug development. Our products and services are generally used by these customers in the manufacture of drug candidates in varying stages clinical trials. If these clinical trials are delayed or cancelled or are otherwise not successful, this could have a significant impact on revenues.

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

During the last three fiscal years, our international sales have been approximately 55-65% of our net sales. As a result, a major portion of our revenues and expenses 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 and operating expenses higher in local currencies since our foreign sales and operating expenses are typically paid for in U.S. Dollars, 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 currently rely on a single supplier, Hitachi High Technologies America, to provide the basic instrument used in our WAVE Systems. While other suppliers of instrumentation and computer hardware are available, we believe that our arrangement with Hitachi offers strategic advantages. Hitachi is replacing its current instrument line with a new instrument line. While we presently plan to convert our technology and applications to this new instrument line, such conversion may not be successful and, therefore, we may incur additional costs for the custom manufacturing of the current 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 significantly reduced the number of employees, including reductions in our research and development staff and our sales and marketing personnel. In addition, we may lose other key management, scientific, technical, sales and 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.

As described above, we compete with many other companies in both our Biosystems and Nucleic Acids operating segments. Many of these competing companies have greater resources than we do 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.

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

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. Nevertheless, continued volatility in the market price for our stock should be expected and we cannot assure you that the price of our stock will increase 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.

If we are unable to maintain our Nasdaq listing, your ability to trade shares of our common stock could suffer.

In order for our common stock to remain listed on the Nasdaq National Market (Nasdaq), we must meet the minimum listing requirements for continued listing, including, among other requirements, minimum bid price and market value of public float requirements. On March 31, 2005, we were notified that the bid price for our common stock over a 30-day period was below the $1.00 minimum required for continued listing of our common stock on the Nasdaq. In order to remain listed, the minimum bid price for our common stock must be at least $1.00 per share over ten consecutive business days before September 27, 2005. If we are not able to regain compliance with this listing requirement, we may be delisted from the Nasdaq. If our common stock is delisted from the Nasdaq, transactions in our common stock would likely be conducted only in the over-the counter market, or potentially on regional exchanges, which could negatively impact the trading volume and price of our common stock, and investors may find it more difficult to purchase or dispose of, or to obtain accurate quotations as to the market value of, our common stock. In addition, if our common stock were not listed on the Nasdaq and the trading price of our common stock fell below $1.00 per share, trading in our common stock would also be subject to the requirements of certain rules which require additional disclosures by broker-dealers in connection with any trades involving a stock defined as a penny stock. In such event, the additional burdens imposed on broker-dealers to effect transactions in our common stock could further limit the market liquidity of our common stock and the ability of investors to trade our common stock.

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 they 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.

The patent underlying our nonexclusive license to manufacture standard nucleic acid building blocks expired as of March 15, 2005. The expiration of this patent could result in additional manufacturers entering the market for these products. Some of these manufacturers may have lower cost structures or other competitive advantages which may reduce our market share and/or our operating margins related to these products.

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.

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

The following analysis gives effect to the restatement of our statements of cash flows for the years ended December 31, 2004 and 2003, as discussed in Note P to the consolidated financial statements.

Overview

Since 2000 (the year of our initial public offering), we have incurred net losses of $94.76 million generally related to our Nucleic Acids operating segment, research and development and selling, general and administrative costs. Our liquidity and working capital positions continued to deteriorate during 2004 predominately due to operating losses that were funded during the year primarily by borrowings under our Credit Line and the sale of our specialty oligonucleotides facility in Boulder, Colorado. At December 31, 2004, we had an accumulated deficit of $107.10 million.

To respond to changes in the overall business climate for our products, our liquidity position and our demand for capital, we instituted significant changes during 2004 designed to, among other things, align our cost structure with projected revenues, focus on opportunities in our BioSystems operating segment, and minimize the adverse financial effect of our Nucleic Acids operating segment. While the primary goals of these changes were to provide the foundation for a self-sustaining, growth-oriented company with positive cash flows and earnings, there can be no assurances that we can achieve these goals.

We determined that our Nucleic Acids operating segment was impaired and sold our specialty oligonucleotide facility.

Based upon information obtained through the process of evaluating strategic alternatives for our Nucleic Acids operating segment, we determined that it was more likely than not that the value of the assets associated with this business were impaired. We engaged an external valuation firm to assist us in conducting an interim period impairment test that resulted in a non-cash charge of $11.97 million related to these assets during the three months ended June 30, 2004. The charge consisted of $9.87 million related to the impairment of goodwill and $2.10 million related to the impairment of property and equipment.

On November 11, 2004, we sold the assets associated with our specialty oligonucleotides manufacturing facility in Boulder, Colorado to a subsidiary of Eyetech Pharmaceuticals, Inc. (Eyetech). The sale price was $3.00 million in cash plus the assumption of the lease on the Boulder facility and certain equipment leases with a gross value of $2.38 million. Substantially all of the 27 employees at the Boulder facility became Eyetech employees. Net proceeds from the sale (after transaction expenses and fees paid to our investment advisors) equaled approximately $2.70 million. In conjunction with this transaction, we recorded a gain on sale of $1.47 million in the fourth quarter of 2004.

We implemented a restructuring plan to better align costs with expected revenues.

On November 13, 2004, our Board of Directors approved a restructuring plan designed to refocus the Company on its BioSystems business segment and to better align our cost structure with anticipated revenues. The plan (which is incremental to the sale of our Boulder, Colorado facility) included a workforce reduction of approximately 60 positions and the closure of two domestic research and development facilities associated with our nucleic acids operating segment and two European field offices. Additionally, we eliminated 11 positions at our chemical

building blocks manufacturing facility in Glasgow, Scotland. In conjunction with these changes, we incurred a charge of $3.57 million during the quarter ending December 31, 2004 related primarily to severance, benefits and facility closures.

We expect the 2004 restructuring plan and the sale of our specialty oligonucleotide manufacturing facility to have a significant impact on our ongoing costs. The pro forma effects on our 2004 loss from operations are as follows.

	2004 As Reported	Sale of Oligonucleotide Facility	Restructuring Plan [1]	Impairment Charges [2]	2004 Pro Forma
			In thousands		
Net sales	$ 33,789	$ 2,051	$	$	$ 31,738
Cost of goods sold	24,596	5,456	706		18,434
Gross profit (loss)	9,193	(3,405)	(706)		13,304
Selling, general and administrative	17,499	33	1,304		16,162
Research and development	6,685	4	3,068		3,613
Restructuring charges	3,570		3,570		
Impairment charges [2]	11,965			11,965	
Gain on sale of facility [3]	(1,466)	(1,466)			
Operating expenses	38,253	(1,429)	7,942	11,965	19,775
Loss from operations	$ (29,060)	$ (1,976)	$ (8,648)	$ (11,965)	$ (6,471)

(1) These restructuring plan pro forma adjustments include the restructuring charge incurred in the fourth quarter of 2004 (see Note N to the accompanying consolidated financial statements) plus actual 2004 direct and identifiable expenses associated with terminated employees and closed offices that were incurred and recorded as costs of goods sold or operating expense prior to the implementation of the restructuring plan. For example, they include personnel costs associated with severed employees, rent associated with closed facilities and other specifically identifiable costs. These costs are not expected to recur in the future. They do not include anticipated additional savings from indirect costs (travel, supplies, etc.) associated with fewer employees and facilities.

(2) The impairment charges in 2004 related to the write-off of all goodwill and impairment of property and equipment in our Nucleic Acids operating segment. We do not expect these charges to recur. Our December 31, 2004 consolidated balance sheet reflects goodwill of $0.64 million that related entirely to our BioSystems operating segment.

(3) The gain on sale of facility related to the sale of our specialty olignucleotide manufacturing facility in Boulder, Colorado.

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Results of Operations

Changes in Results of Operations

	Amounts in Thousands						
				Dollar Change		Percent Change	
	2004	2003	2002	2003 to 2004	2002 to 2003	2003 to 2004	2002 to 2003
Net Sales							
Bioinstruments	$ 14,385	$ 17,916	$ 19,098	$ (3,581)	$ (1,182)	(20)%	(6)%
Bioconsumables	8,838	7,260	5,137	1,578	2,123	22%	41%
Discovery Services	2,020	868		1,152	868	133%	
Total BioSystems operating segment	25,243	26,044	24,235	(801)	1,809	(3)%	7%
Chemical Building Blocks	6,488	6,631	13,319	(143)	(6,688)	(2)%	(50)%
Specialty Oligonucleotides	2,058	1,191		867	1,191	73%	
Total Nucleic Acids operating segment	8,546	7,822	13,319	724	(5,497)	9%	(41)%
Total Net Sales	33,789	33,866	37,554	(77)	(3,688)	(1)%	(10)%
Cost of Goods Sold							
Bioinstruments	6,382	7,343	7,650	85	250	1%	3%
Bioconsumables	4,012	3,475	2,284	537	1,191	15%	52%
Discovery Services	1,603	557		1,046	557	188%	
Total BioSystems operating segment	11,997	11,375	9,934	622	1,441	5%	15%
Chemical Building Blocks	7,165	6,937	9,635	228	(2,698)	3%	(28)%
Specialty Oligonucleotides	5,434	6,003		(569)	6,003	(9)%	
Total Nucleic Acids operating segment	12,599	12,940	9,635	(341)	3,305	(3)%	34%
Total Cost of Goods Sold	24,596	24,315	19,569	(281)	4,746	(1)%	24%
Selling, General and Administrative Expenses	17,499	17,324	24,199	175	(6,875)	1%	(28)%
Research and Development Expenses	6,685	9,305	12,201	(2,620)	(2,896)	(28)%	(24)%
Restructuring Charges	3,570	738	3,282	2,832	(2,544)	384%	(78)%
Impairment Charges	11,965	4,772		5,726	4,772	120%	
Gain on sale of facility	1,466			1,466			
Other Income (Expense)	(5,406)	(305)	437	5,102	742	1673%	170%

Years Ended December 31, 2004 and 2003

Net Sales. Net sales during 2004 decreased $0.08 million or 1% from 2003 as a result of a $0.80 million or 3% decrease in sales in our BioSystems operating segment offset by a $0.72 million or 9% increase in sales in our Nucleic Acids operating segment.

The decrease in sales in our BioSystems operating segment resulted from a decrease of $3.58 million or 20% from bioinstruments that was partially offset by increases in sales of bioconsumables of $1.58 million or 22% and Discovery Services of $1.15 million or 133%. The decrease of bioinstrument sales was primarily the result of a decline in the number of WAVE Systems sold from 122 in 2003 to 107 in 2004. The selling prices of our instruments vary based on the specific model and optional accessories. We had an installed base of approximately 1,200 units at December 31, 2004. The increase in the installed base of instruments

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continues to drive increases in sales of bioconsumables used with these instruments. The increase in Discovery Services revenue during 2004 was primarily attributable to the discovery services agreements that we entered into with pharmaceutical companies to support their clinical development of oncology therapeutics. We plan to continue to seek opportunities to provide genetic variation discovery and analysis services to pharmaceutical and other customers and believe that these services provide us a significant opportunity to expand revenues in the future.

Nucleic Acids operating segment sales increased by $0.72 million or 9% in 2004 compared to 2003 as a result of a substantial increase in sales of specialty oligonucleotides produced by our facility in Boulder, Colorado as raw materials in DNA-based drug candidates. As a result of the sale of this facility in November 2004, we will no longer manufacture or sell oligonucleotides. Sales of our chemical building block products produced in our Glasgow, Scotland facility were essentially the same in 2004 as in 2003. During 2004, sales of chemical building blocks to Geron Corporation totaled $4.15 million and represented 12% of total consolidated net sales, 49% of total net sales within our Nucleic Acids operating segment and 61% of chemical building blocks revenue. We do not have long-term sales commitments from Geron Corporation and, accordingly, the amount we sell them is subject to change. Revenues from our Nucleic Acids operating segment would be substantially reduced if Geron s need for our products declined or if it decided to obtain these products from other suppliers.

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). It also includes direct costs (primarily personnel costs and supplies) associated with our Discovery Services product line. Depreciation expense included in costs of goods sold totaled $2.10 million and $1.74 million in 2004 and 2003, respectively.

Costs of goods sold during 2004 decreased $0.28 million or 1% from 2003 as a result of a $0.62 million or 5% increase in our BioSystems operating segment offset by a $0.34 million or 3% decrease in our Nucleic Acids operating segment. The overall decrease is consistent with the decrease in net sales.

Gross profit was $9.19 million or 27% of total net sales during 2004 compared to $9.55 million and 28% during 2003. A summary of margins by operating segment follows (dollars in thousands):

	2004		2003	
	Dollars	Percent	Dollar	Percent
BioSystems operating segment	$ 13,246	52%	$ 14,669	56%
Nucleic Acids operating segment	(4,053)	(47)%	(5,118)	(65)%
	$ 9,193	27%	$ 9,551	28%

We expect gross profits from our BioSystems operating segment to be within historic ranges of 50% to 60%. As a result of the sale of our Boulder, Colorado facility and the restructuring plan implemented in November 2004, we anticipate that our cost of goods sold will be significantly improved. However, our Nucleic Acids operating segment continues to have excess capacity in its Glasgow, Scotland manufacturing facility that will adversely impact costs of goods sold and margins until demand for our Nucleic Acids building block products increase.

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 totaled $17.50 million in 2004 compared to $17.32 million in 2003, an increase of $0.18 million or 1%. This increase related to a $1.26 million increase in selling expenses offset by a $1.09 million reduction in general and administrative expenses. As a percentage of revenue, selling, general and administrative expenses totaled just over 51% in both 2004 and 2003. Depreciation expense include in selling, general and administrative expenses totaled $1.02 million and $1.28 million in 2004 and 2003, respectively.

Research and Development Expenses. Research and development expenses primarily include personnel costs, supplies, and facility costs. These costs totaled $6.69 million in 2004 compared to $9.31 million in 2003, a decrease of $2.62 million or 28%. As a percentage of revenue, research and development expenses totaled 20% and 27% of revenue in 2004 and 2003, respectively. These decreases related to our focus on expense control, the sale of our Boulder, Colorado facility and the restructuring plan implemented in November 2004. Depreciation expense included in research and development expenses included $0.88 million and $0.89 million in 2004 and 2003, respectively. We expect to continue to invest a substantial portion of our revenues in research and development activities primarily associated with our BioSystems operating segment. Research and development costs are expensed in the year in which they are incurred.

Restructuring Charges. On November 13, 2004, our Board of Directors approved a restructuring plan designed to refocus on the BioSystems operating segment and to better align the Company s cost structure with anticipated revenues. The plan (which is incremental to the sale of the specialty oligonucleotide manufacturing facility in Boulder, Colorado) included a workforce reduction of approximately 60 positions and the closure of two domestic research and development facilities associated with our Nucleic Acids

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operating segment and two European field offices. Additionally, we eliminated approximately 10 positions at its chemical building blocks manufacturing facility in Glasgow, Scotland. In conjunction with these changes, we incurred a charge of $3.57 million during the quarter ending December 31, 2004 consisting of severance benefits of $1.41 million, future rents on closed facilities (net of projected sublease rents) of $1.24 million, the write-off of property and equipment specifically attributable to closed facilities of $0.74 million and other costs of $0.18 million. We had accrued expenses associated with this restructuring plan of $1.91 million at December 31, 2004 of which $1.49 million is expect to be paid in 2005.

Impairment Charges. During the second quarter of 2004, our Board of Directors directed us to explore strategic alternatives for the Nucleic Acids operating segment. The process included significant due diligence by us, our advisors and prospective independent buyers and other interested parties. Based upon information obtained through this process, we determined that it was more likely than not that the value of the assets associated with this business were impaired. We engaged an external valuation firm to assist us in conducting an interim period impairment test that resulted in us recording a non-cash charge of $11.97 million related to these assets during the three months ended June 30, 2004. The charge consisted of $9.87 million related to the impairment of goodwill and $2.10 million related to the impairment of property and equipment.

Gain on Sale of Facility. On November 11, 2004, we sold the assets associated with our specialty oligonucleotides manufacturing facility in Boulder, Colorado to a subsidiary of Eyetech Pharmaceuticals, Inc. (Eyetech). The sale price was $3.00 million in cash plus the assumption of the lease on the Boulder facility and of certain equipment leases with a gross value of $2.38 million. Net proceeds from the sale (after transaction expenses and fees paid to our investment advisors) equaled approximately $2.70 million. In conjunction with this transaction, we recorded a gain on sale of $1.47 million in the fourth quarter of 2004.

Other Income (Expense). Other expense during 2004 of $5.41 million consisted of interest expense of $2.38 million, loss on debt extinguishment of $2.86 million, and other net expense of $0.16 million which consisted primarily of net investment losses associated with available-for-sales securities (Geron stock). Other expense during 2003 of $0.31 million consisted of interest income of $0.20 million, interest expense of $0.31 million and other net expenses of $0.20 million.

The increase in interest expense resulted from higher average debt balances and interest rates. Gross debt totaled $8.95 million at December 31, 2004 compared to $4.69 million at December 31, 2003. Our Credit Line and Term Note had average balances during 2004 of $5.69 million and $2.73 million, respectively, with weighted average interest rates of 6.39% and 6.48%, respectively. The high and low borrowings under our Credit Line during 2004 were $7.23 million and $2.63 million, respectively. Interest expense in 2004 and 2003 includes amortization of related premiums and discounts of $1.64 million and $0, respectively.

Loss on debt extinguishment totaled $2.86 million during 2004. As described in Note E to the accompanying consolidated financial statements, certain August 31, 2004 modifications to our Laurus Loans were treated as extinguishments for financial reporting purposes since the change in present value of expected cash flows between the original and modified agreements is greater than 10%. As such, we recorded a loss on extinguishment of debt of $2.86 million at August 31, 2004 reflecting the difference between (i) the recorded amount of debt, net of related discounts, of $7.43 million and (ii) the fair value of the new debt instrument of $10.29 million plus the fair value of the new warrants of $0.11 million. The difference between the fair value of the new debt of $10.29 million and the face value of the debt of $8.57 million represents a premium, which will be reflected as a reduction of interest expense over the life of the new debt.

Income Tax Expense. Income tax expense relates solely to our operations in certain foreign countries and certain states. In addition to income tax expense in these jurisdictions, we do not record any income tax benefits due to our cumulative losses in recent years, expected losses in future years and the uncertainty as to whether we will be able to utilize any additional losses as carrybacks. We will continue to assess the recoverability of deferred tax assets and the related valuation allowance. We expect to continue to incur losses and expect to continue to provide

valuation allowances against deferred tax assets. 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. Our deferred tax assets as of December 31, 2004 were $38.29 million and were entirely offset by a valuation allowance. As of December 31, 2004, we had federal net operating loss carryforwards of approximately $91.47 million. Our net operating loss carryforwards will expire at various dates from 2008 through 2024, if not utilized. We also had state income tax loss carryforwards of $37.62 million at December 31, 2004. These carryforwards will also expire at various dates beginning in 2005 if not utilized.

Years Ended December 31, 2003 and 2002

Net Sales. Net sales decreased in 2003, as compared to 2002, due to a significant decline in demand for our Nucleic Acids products. Sales in our Nucleic Acids operating segment decreased due to a significant decline in demand for our chemical building block products. These products are used by our biopharmaceutical and pharmaceutical customers as raw materials in DNA based drug candidates. The decrease in demand is largely attributable to the timing of completion and/or failure of Phase III clinical trials by certain of our large customers. This decrease in demand for DNA building blocks in 2003 was partially offset by sales of oligonucleotides generated by our start-up manufacturing facility in Boulder, Colorado.

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Sales in our BioSystems operating segment increased in 2003. Revenues from sales of WAVE systems and related services were relatively flat with 2002. However, bioconsumable product sales strength resulted from increased WAVE related consumable usage as the installed base of WAVE Systems has increased and as researchers begin to use them more extensively in place of other methods of DNA analysis. Also contributing to the increase were revenues generated by new product sales including our Optimase product line that was launched in 2002 and began to see increased usage in 2003. Sales of WAVE systems declined slightly from 2002 to 2003 offset by an increase in related services revenues. The slight decline in systems sales was mainly due to continued low sales volumes to our North American customer base. Increased services revenue was attributable to our focus on providing genetic variation discovery and analysis services to our pharmaceutical base of customers.

Cost of Goods Sold. Cost of goods sold increased in 2003 over 2002 despite the decline in our revenues. This increase was anticipated and was attributable mainly to excess manufacturing capacity in our Nucleic Acids operating segment. The BioSystems operating segment cost of goods sold as a percentage of sales declined year over year but remained within historical ranges at approximately 43%. The margins in our Nucleic Acids operating segment were negatively impacted by higher manufacturing costs and excess capacity due largely to our plant expansion efforts in Glasgow, Scotland and Boulder, Colorado.

Selling, General and Administrative Expenses. Selling, general and administrative expenses decreased significantly from 2002 to 2003 as a result of our restructuring activities and focus on expense control. Nearly half of the total decrease was in personnel and personnel related expenses as we significantly reduced our employee headcount. Additionally, reductions in outside services, advertising, sales promotions, depreciation and travel expenses accounted for approximately 30% of the total decrease.

Research and Development Expenses. Research and development expenses decreased significantly as a result of our restructuring activities and focus on expense control. Over 60% of the total decrease was in personnel and personnel related expenses as we significantly reduced our employee headcount. Additionally, significant reductions in outside services, supplies, depreciation and travel expenses were realized. During 2003 there were no capitalized software costs, whereas in the prior year we capitalized approximately $1.13 million of development costs. Research and development expenses consist of salaries and related personnel costs of researchers and software developers, material costs for prototypes and test units, legal expenses relating to intellectual property research and application development activities, testing and enhancement of our products, and amortization of intellectual property. We expense our research and development costs in the year in which they are incurred with the exception of certain capitalized software development costs.

Restructuring Charges. During the fourth quarter of 2002 management formulated and executed a significant portion of a restructuring plan. The plan was developed to reduce expenses thereby better aligning the Company s expense structure with current business prospects. The plan included employee terminations, office closures, termination of collaborations and write-offs of abandoned intellectual property. We continued to execute the plan during the first half of 2003 resulting in the additional charges recorded in 2003. These charges consisted of mainly employee severance costs and the write-off of a note receivable related to the abandonment of a product development collaboration. The note receivable write-off was a non-cash charge of $0.35 million.

Goodwill Impairment Charge. Statement of Financial Accounting Standard (SFAS) No. 142, *Goodwill and Other Intangible Assets,* establishes guidelines for accounting for goodwill and other intangible assets and provides that goodwill and other intangible assets with indefinite lives will not be amortized, but will be evaluated for impairment annually. The Company engaged an external valuation firm to assist with the completion of its annual impairment test during the fourth quarter of 2003. As a result of this test we recorded a non-cash goodwill impairment charge of $4.77 million related to our nucleic acids segment.

Income Taxes. The Company s tax expense relates to its operations in certain foreign countries and certain states. No tax benefits are being recorded due to our cumulative losses in recent years, expected losses in future years and the uncertainty as to whether we will be able to utilize

any additional losses as carrybacks. We will continue to assess the recoverability of deferred tax assets and the related valuation allowance. We expect to continue to incur losses and expect to continue to provide valuation allowances against deferred tax assets. 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. Our deferred tax assets as of December 31, 2003 were $30.60 million and were entirely offset by a valuation allowance. As of December 31, 2003, we had federal net operating loss carryforwards of approximately $78.50 million. We also had state income tax loss carryforwards of $28.70 million at December 31, 2003.

Liquidity and Capital Resources

Our working capital (deficiency) positions at December 31, 2004 and 2003 were as follows:

	December 31,		
	2004	**2003**	**Change**
		In Thousands	
Current assets [(1)]	$ 17,908	$ 24,378	$ (6,470)
Current liabilities	18,724	12,248	6,476
Working capital (deficiency)	$ (816)	$ 12,130	$ (12,946)

(1) Current assets include cash and cash equivalents of $1.00 million and $1.24 million at December 31, 2004 and 2003, respectively.

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The deterioration of our working capital position during 2004 was predominately due to operating losses that were funded primarily by borrowings under our Credit Line, the sale of our specialty oligonucleotides facility in Boulder, Colorado and the reclassification at December 31, 2004 of a portion of our chemical building blocks inventory with a book value of $2.86 million as a long-term asset rather than as a current asset. The reclassification of these inventories was based on sales forecasts for these products. As of March 31, 2005, we had cash and cash equivalents of $1.37 million plus an additional $2.29 million available under our Credit Line.

We have experienced recurring net losses and had an accumulated deficit of $107,101 at December 31, 2004. Based on our 2005 operating plan, we believe existing sources of liquidity will be sufficient to meet cash needs during 2005. If necessary, we believe we can manage costs and expenses at reduced levels to conserve working capital. The need for any such cost and expense reductions during 2005 would likely delay implementation of our business plan. Additionally, we may pursue additional financing alternatives. Ultimately, we must achieve sufficient revenue levels to support our cost structure.

Laurus Loans. The Credit Line is a $7.50 million line of credit that we entered into with Laurus in December 2003. The term of the Credit Line is three years carrying an interest rate of 2.0% over the prime rate or a minimum of 6.0%. Funds available under the Credit Line are determined by a borrowing base equal to 90% of eligible accounts receivable balances plus up to $1.00 million related to inventory balances. The Credit Line is secured by most of our assets. Prior to amendments to the Credit Line discussed below, payment of interest and principal could, under certain circumstances, be made with shares of our common stock at a fixed conversion price of $2.20 per share. Conversion of this debt to common stock may be made at the election of Laurus or the Company. We could elect to convert only if our shares trade at a price exceeding $2.42 per share for ten consecutive trading days, and such conversion is further subject to trading volume limitations and a limitation on the total beneficial ownership by Laurus of our common stock. Upon entering into the Credit Line, we issued warrants to Laurus to acquire 550,000 shares of the our common stock at an exercise price exceeding the average trading price of our common stock over the ten trading days prior to the date of the warrant.

In February 2004, we entered into the $2.75 million Term Note with Laurus. The Term Note carries an interest rate of 2.0% over the prime rate or a minimum of 6.0% and has a term of 3 years. Prior to amendments to the Term Note discussed below, the principal and interest on the Term Note could be converted into our common stock at a fixed conversion price of $2.61 per share. Upon entering the Term Note, we issued warrants to Laurus to acquire 125,000 shares of our common stock. Borrowings under the Term Note were primarily used to retire the mortgage debt on our Glasgow, Scotland facility. Remaining borrowings of approximately $0.75 million were used to complete the build-out of the Glasgow facility, complete the consolidation our Glasgow operations into the new facility and provide funds for operations.

In February 2004, Laurus waived the borrowing base limitation on the Credit Line, thereby making the full $7.50 million facility available to us regardless of the available collateral. On August 31, 2004, Laurus agreed to extend the borrowing base waiver on the Credit Line through March 19, 2005. In addition, Laurus deferred certain payments due under the Term Note and reduced the interest rate on both of the Laurus Loans to 0% for any day the closing sale price of our common stock is at or above $1.75 per share. In return, we lowered the conversion price on each of the Laurus Loans to $1.00 per share and issued a warrant to Laurus covering an additional 400,000 common shares at an exercise price of $1.25 per share. The closing price of our common stock on August 31, 2004 was $1.20 per share.

On March 18, 2005, Laurus agreed to further extend the borrowing base waiver on the Credit Line until March 31, 2006. In connection with this waiver, we agreed to allow Laurus to convert $1.88 million of the outstanding principal balance under the Credit Line into 3,600,000 shares of common stock. In addition, on March 24, 2005 we agreed to allow Laurus to convert $0.65 million of the outstanding principal balance of the Term Note into 1,250,000 shares of common stock. As a result, we have increased the amount available under the Credit Line by $1.88 million and have eliminated substantially all remaining 2005 scheduled principal payments on the Term Loan.

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Analysis of Cash Flows

Cash flows used in operating activities totaled $12.75 million during 2004 compared to $13.02 million during 2003. The use in 2004 related primarily to a net loss of $34.37 million offset by non-cash charges of $21.80 million. Non-cash charges consisted of depreciation and amortization, certain restructuring charges, impairment charges, certain financing costs and loss on debt extinguishment. Working capital and other adjustments decreased cash flows from operating activities by $0.18 million.

Cash flows from investing activities totaled $6.03 million during 2004 compared to cash flows used in investing activities of $2.95 million during 2003. The investing cash flows generated in 2004 were from the sale of available for sale securities received from Geron for goods and services and the sale of our specialty oligoneucleotide manufacturing facility and reductions in other assets that were offset by purchases of property and equipment.

Cash flows from financing activities totaled $6.00 million during 2004 compared to $7.30 million during 2003. The cash from financing activities in 2004 relate primarily to net draws on our Credit Line and proceeds from the Term Note that were offset by payments of long-term debt.

Obligations and Commitments

Our ongoing capital commitments consist of debt service requirements and obligations under capital leases. The following table sets forth our contractual obligations as of December 31, 2004 along with cash payments due in each period indicated:

	Payments Due by Period				
	2005	2006	2007	2008	2009 and Thereafter
	In thousands				
Credit Line [1]	$ 5,948	$	$	$	$
Term Note [1]	850	900	850		
Operating lease payments [2]	1,958	1,382	486	187	372
Total contractual obligations	$ 8,756	$ 2,282	$ 1,336	$ 187	$ 372

(1) Interest payments under the Laurus Loans are paid monthly based on outstanding debt and prevailing interest rates. We currently expect to pay total interest on these loans of between $0.60 million and $0.75 million during 2005.

(2) These are gross lease commitments. Certain facilities underlying these commitments are sublet to independent third parties. Annual rents from these tenants are expected to total $0.32 million, $0.17 million, and $0.02 million in 2005, 2006 and thereafter, respectively.

At December 31, 2004, we had firm commitments totaling $0.80 million to Hitachi High Technologies America to purchase components used in our WAVE Systems. These commitments will be fulfilled during 2005.

Off Balance Sheet Arrangements

At December 31, 2004 and 2003, 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 the Company s accounting policies are considered critical as they are both important to the portrayal of the Company s 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 following.

The age of the accounts receivable,

Customer credit history,

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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. Cost is computed using standard costs for finished goods and average or latest actual cost for raw materials and work in process.

Depreciation and Amortization of Long-Lived Assets. The Company s long-lived assets consist primarily of property, plant and equipment, goodwill, patents, intellectual property and capitalized software development costs. 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 charges resulting in lower profits. 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 3 to 15 years. The Company capitalizes the external and in-house legal costs and filing fees associated with obtaining patents on its new discoveries and amortizes these costs using the straight-line method over the shorter of the legal life of the patent or its economic life, generally 17 years, beginning on the date the patent is issued. Intellectual property, which is purchased technology, is recorded at cost and is amortized over its estimated useful life.

Impairment of Long-Lived Assets. The Company evaluates goodwill for impairment on an annual basis. The Company assesses the recoverability of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. These computations utilize judgments and assumptions inherent in management s estimate of future undiscounted and discounted cash flows to determine recoverability of these assets. If management s assumptions about these assets were to change as a result of events or circumstances, the Company may be required to record an impairment loss.

Revenue Recognition. Revenue on the sales of products is 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 sales terms do not provide for the right of return unless the product is damaged or defective. Revenues 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.

Recently Issued Accounting Pronouncements

On December 16, 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 123R, Share-Based Payment. SFAS No.123R addresses the accounting for share-based payment transactions in which an enterprise receives employee services in exchange for (a) equity instruments of the enterprise or (b) liabilities that are based on the fair value of the enterprise s equity instruments or that may be settled by the issuace of such equity instruments. SFAS No. 123R eliminates the ability to account for

share-based compensation transactions using Accounting Principles Board Opinion No. 25 and generally requires that such transactions be accounted for using a fair-value-based method. We expect to adopt this standard on January 1, 2006. We are currently assessing the final impact of this standard on our financial position, results of operations or cash flows. This assessment includes evaluating option valuation methodologies and assumptions as well as potential changes to compensation strategies.

On November 24, 2004, the FASB issued SFAS No. 151, Inventory Costs an amendment of ARB No. 43. SFAS No. 151 requires idle facility expenses, freight, handling costs, and wasted material (spoilage) costs to be excluded from the cost of inventory and expensed when incurred. It also requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. SFAS No. 151 will be effective at the beginning of 2006. We are currently assessing the final impact of this standard on our financial position, results of operations or cash flows

Impact of Inflation

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

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Foreign Currency Rate Fluctuations

During the last three fiscal years, our international sales have represented approximately 50-65% of our net sales. These sales of products in foreign countries are mainly completed in either British Pounds Sterling or the Euro. Additionally, we have two wholly owned subsidiaries, Transgenomic, LTD., and Cruachem, LTD., whose operating currency is British Pounds Sterling and the Euro. 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 on the balance sheet dates. As a result we are subject to exchange rate risk. The operational expenses of our foreign subsidiaries help to reduce the currency exposure we have based on our sales denominated in foreign currencies by converting foreign currencies directly into goods and services. As such management feels we do not have a material exposure to foreign currency rate fluctuations at this time.

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Item 8. Financial Statements and Supplementary Data.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Transgenomic, Inc.

Omaha, Nebraska

We have audited the accompanying consolidated balance sheets of Transgenomic, Inc. and subsidiaries (the Company) as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders equity (deficit), and cash flows for each of the three years in the period ended December 31, 2004. Our audit also included the financial statement schedule listed in the Index at Item 15. These financial statements and financial statement schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on the financial statements and financial statement schedule 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Transgenomic, Inc. and subsidiaries at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Note O, during the first quarter of 2005, the Company obtained an extension of the waiver of the borrowing base limit through March 31, 2006.

As discussed in Note P, the Company restated its consolidated statements of cash flows for the years ended December 31, 2004 and 2003.

/s/ DELOITTE & TOUCHE LLP

Omaha, Nebraska

April 14, 2005 (May 25, 2005, as to the effects of the restatement discussed in Note P)

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

As of December 31, 2004 and 2003

(Dollars in thousands except per share data)

	2004	2003
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 1,002	$ 1,241
Accounts receivable (net of allowances for bad debts of $1,051 and $549)	10,197	10,877
Inventories	5,366	10,584
Prepaid expenses and other current assets	1,343	1,676
Total current assets	17,908	24,378
PROPERTY AND EQUIPMENT:		
Land and buildings	2,427	2,239
Equipment	19,263	20,362
Furniture and fixtures	5,781	9,054
	27,471	31,655
Less: accumulated depreciation	13,946	12,951
	13,525	18,704
GOODWILL	638	10,503
OTHER ASSETS	5,387	3,721
	$ 37,458	$ 57,306
LIABILITIES AND STOCKHOLDERS EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 3,431	$ 3,580
Other accrued expenses	7,318	3,874
Accrued compensation	636	959
Line of credit	6,514	2,142
Current portion of long-term debt	825	1,693
Total current liabilities	18,724	12,248
Long-term debt	2,199	
Total liabilities	20,923	12,248
COMMITMENTS AND CONTINGENCIES (Note F)		
STOCKHOLDERS EQUITY:		

Preferred stock, $.01 par value, 15,000,000 shares authorized, none outstanding		
Common stock, $.01 par value, 60,000,000 shares authorized, 29,330,874 and 28,119,122 shares outstanding in 2004 and 2003, respectively	299	286
Additional paid-in capital	120,798	115,904
Accumulated other comprehensive income	2,539	1,597
Accumulated deficit	(107,101)	(72,729)
Total stockholders equity	16,535	45,058
	$ 37,458	$ 57,306

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

	2004	2003	2002
NET SALES	$ 33,789	$ 33,866	$ 37,554
COST OF GOODS SOLD	24,596	24,315	19,569
Gross profit	9,193	9,551	17,985
OPERATING EXPENSES:			
Selling, general and administrative	17,499	17,324	24,199
Research and development	6,685	9,305	12,201
Restructuring charges (Note N)	3,570	738	3,282
Impairment charges (Note C)	11,965	4,772	
Gain on sale of facility (Note M)	(1,466)		
	38,253	32,139	39,682
LOSS FROM OPERATIONS	(29,060)	(22,588)	(21,697)
OTHER INCOME (EXPENSE):			
Interest expense	(2,383)	(315)	(62)
Loss on debt extinguishment	(2,859)		
Other net	(164)	10	499
	(5,406)	(305)	437
LOSS BEFORE INCOME TAXES	(34,466)	(22,893)	(21,260)
CURRENT INCOME TAX EXPENSE (BENEFIT)	(94)	65	105
NET LOSS	$ (34,372)	$ (22,958)	$ (21,365)
BASIC AND DILUTED LOSS PER SHARE	$ (1.19)	$ (0.94)	$ (0.91)
BASIC AND DILUTED WEIGHTED AVERAGE SHARES OUTSTANDING	29,006,241	24,483,861	23,582,687

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT)

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

	Common Stock		Additional			Accumulated Other		
	Outstanding Shares	Par Value	Paid in Capital	Unearned Compensation	Accumulated Deficit	Comprehensive Income (Loss)	Treasury Stock	Total
Balance, January 1, 2002	23,606,003	$ 239	$ 113,260	$ (158)	$ (28,406)	$ (81)	$ (2,750)	$ 82,104
Net loss					(21,365)	(21,365)		(21,365)
Other comprehensive income (loss):								
Foreign currency translation adjustment						493		493
Unrealized gain on available for sale securities						(34)		(34)
Comprehensive loss						(20,906)		
Issuance and exercise of stock options or warrants	81,900	1	460	(51)				410
Issuance of shares for employee stock purchase plan	56,842		214					214
Deferred compensation				131				131
Purchase of treasury stock	(232,700)						(438)	(438)
Balance, December 31, 2002	23,512,045	240	113,934	(78)	(49,771)	378	(3,188)	61,515
Net loss					(22,958)	(22,958)		(22,958)
Other comprehensive income (loss):								
Foreign currency translation adjustment						1,219		1,219
Comprehensive loss						(21,739)		
Issuance of stock options and warrants			386					386
Beneficial Conversion Premium			480					480
Issuance of shares	4,500,000	45	969				3,188	4,202
Issuance of shares for employee stock purchase plan	107,077	1	135					136
Amortization of unearned compensation				78				78
Balance, December 31, 2003	28,119,122	286	115,904		(72,729)	1,597		45,058
Net loss					(34,372)	(34,372)		(34,372)
Other comprehensive income (loss):								
Foreign currency translation adjustment						942		942

Comprehensive loss						(33,430)		
Issuance of stock options and warrants			189					189
Beneficial Conversion Premium			2,420					2,420
Issuance of shares	1,134,850	12	2,198					2,210
Issuance of shares for employee stock purchase plan	76,902	1	87					88
Balance, December 31, 2004	29,330,874	$ 299	$ 120,798	$	$ (107,101)	$ 2,539	$	$ 16,535

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

	2004 (as restated, see Note P)	2003 (as restated, see Note P)	2002
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (34,372)	$ (22,958)	$ (21,365)
Adjustments to reconcile net loss to net cash flows from operating activities:			
Depreciation and amortization	4,625	4,597	3,993
Non-cash restructuring charges (Note N)	2,027	364	1,698
Impairment charges (Note C)	11,965	4,772	
Gain on sale of facility (Note M)	(1,466)		
Non-cash financing costs	1,642		
Loss on debt extinguishment	2,859		
(Gain)/Loss on sale of securities	128	(64)	
Other	18	93	131
Changes in operating assets and liabilities, net of acquisitions:			
Purchase of trading securities		(1,566)	
Proceeds from sale of trading securities		1,519	
Accounts receivable	(3,334)	342	794
Inventories	2,611	2,887	(5,767)
Prepaid expenses and other current assets	(130)	334	527
Accounts payable	(268)	(1,509)	2,249
Accrued expenses	941	(1,828)	(204)
Net cash flows from operating activities	(12,754)	(13,017)	(17,944)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Securities received in settlement of accounts receivable	(4,397)	(277)	
Purchases of available for sale securities			(19,088)
Proceeds from the maturities and sale of available for sale securities	4,269	4,000	39,355
Purchase of property and equipment	(1,758)	(6,413)	(11,468)
Change in other assets	522	(543)	(2,871)
Proceeds from sale of specialty oligonuceotide manufacturing facility (Note M)	3,000		
Proceeds from asset sales		9	
Net cash flows from investing activities	6,033	(2,947)	5,928
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net change in line of credit	4,956	2,992	
Proceeds from long-term debt	2,750		1,559
Payments on long-term debt	(1,779)	(35)	

Issuance of common stock, net of expenses	71	4,338	624
Purchase of treasury stock			(438)
Net cash flows from financing activities	5,998	7,295	1,745
EFFECT OF FOREIGN CURRENCY EXCHANGE RATE CHANGES ON CASH	484	175	393
NET CHANGE IN CASH AND CASH EQUIVALENTS	(239)	(8,494)	(9,878)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	1,241	9,735	19,613
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 1,002	$ 1,241	$ 9,735
SUPPLEMENTAL CASH FLOW INFORMATION			
Cash paid during the year for:			
Interest	$ 560	$ 314	$ 30
Income taxes, net	(94)	70	120
Non-cash transactions:			
Available for sale securities acquired for goods and services	4,397	277	
Conversions of debt to equity	2,226		

See notes to consolidated financial statements.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business Description.

Transgenomic, Inc., a Delaware corporation, and its subsidiaries (the Company) provide innovative products and services for the synthesis, purification and analysis of nucleic acids. The Company s products and services include automated instrument systems, associated consumables, nucleic acid chemical building blocks, nucleic acid synthesis products, novel chemistry development for nucleic acids, and genetic variation discovery services. The Company develops, assembles, manufactures and markets its products and services to the life sciences industry to be used in research focused on molecular genetics of humans and other organisms. Such research could lead to development of new diagnostics and therapeutics. The Company s business plan is to participate in the value chain associated with these activities by providing key technology, tools, consumables, biochemical reagents and services to those entities engaged in basic biomedical research and the development of diagnostics and therapeutic agents.

The Company operates in two reportable segments, BioSystems and Nucleic Acids. The BioSystems operating segment generates revenue from the sale of automated instrument systems and associated consumable products and services. The Nucleic Acids operating segment generates revenue from the sale of nucleic acid-based products and services.

The Company markets and sells these products primarily through a direct sales and support group in North America and Europe and through a network of distributors in the Pacific Rim and other international markets. These sales efforts are directed from the Company headquarters in Omaha, Nebraska and through a series of sales and support offices strategically located throughout the United States, Europe and Japan.

The Company has experienced recurring net losses and had an accumulated deficit of $107,101 at December 31, 2004. Based on the Company s 2005 operating plan, management believes its existing sources of liquidity will be sufficient to meet its cash needs during 2005. If necessary, the Company s management believes they can manage costs and expenses at reduced levels to conserve working capital. The need for any such costs and expense reductions during 2005 would likely delay implementation of the Company s business plan. Additionally, management may pursue additional financing alternatives. Ultimately, the Company must achieve sufficient revenue levels to support its cost structure.

Principles of Consolidation.

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

Cash and Cash Equivalents.

For purposes of reporting cash flows, cash and cash equivalents include cash and temporary investments with original maturities at acquisition of three months or less.

Short Term Investments.

The Company classifies all of its short-term investments with maturities at acquisition of greater than three months as available for sale securities. Such short-term investments consist primarily of United States government and federal agency securities, corporate commercial paper and corporate debt that are stated at market value, with unrealized gains and losses on such securities reflected, net of tax, as other comprehensive income in stockholders equity. Realized gains and losses on short term investments are included in earnings and are derived using the specific identification method for determining the cost of securities. It is the Company s intent to maintain a liquid portfolio to take advantage of investment opportunities; therefore, all securities are considered to be available for sale and are classified as current assets.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

During 2003 and 2004, the Company accepted common stock from one of its customers (Geron Corporation) as payment for goods and services. These shares were classified as available-for-sale securities. Net losses on these securities of $128 during 2004 and net gains of $111 during 2003 were reflected as other expense on the consolidated statement of operations. Proceeds from the sales of these available for sale securities were reflected within net cash flows from investing activities.

Accounts Receivable.

Accounts receivable are shown net of allowance for doubtful accounts. The following is a summary of activity for the allowance for doubtful accounts during each of the three years ended December 31, 2004:

	Beginning Balance	Additional Charges to Income	Deductions from Reserve	Ending Balance
Year Ended December 31, 2004	$ 549	$ 534	$ 32	$ 1,051
Year Ended December 31, 2003	$ 450	$ 174	$ 75	$ 549
Year Ended December 31, 2002	$ 213	$ 418	$ 181	$ 450

While payment terms are generally 30 days, the Company has also provided extended payment terms of up to 90 days in certain cases.

Inventories.

Inventories are stated at the lower of cost or market. Cost is computed using standard costs for finished goods and average or latest actual cost for raw materials and work in process.

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:

Buildings	15 years
Leasehold improvements	3 to 7 years
Furniture and fixtures	5 to 7 years
Production equipment	5 to 7 years
Computer equipment	3 to 5 years
Research and development equipment	3 to 5 years
Demonstration equipment	3 to 5 years

Depreciation of property and equipment totaled $4,009, $3,983 and $3,993 in 2004, 2003 and 2002, respectively.

Goodwill and other Intangible Assets

The Company adopted Statement of Financial Accounting Standards (SFAS) No. 142, *Goodwill and Other Intangible Assets,* beginning on January 1, 2002. SFAS No. 142 provides that goodwill and other intangible assets with indefinite lives will not be amortized, but will be tested for impairment annually. Impairment occurs when the fair value of the asset is less than its carrying amount. If impaired, the asset s carrying value is reduced to its fair value. Identifiable intangible assets with definite lives are amortized over their estimated useful lives and tested for impairment as events or changes in circumstances indicate the carrying amount of the asset may be impaired. Impairment occurs when the carrying value is not recoverable and the fair value of the asset is less than the carrying value.

The Company has not amortized goodwill for any period presented. Accordingly, there are no differences between reported net loss and loss per share related to goodwill amortization.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

Other Assets.

Other assets include long-term inventory, patents, intellectual property, deferred financing costs and capitalized software development costs. The Company capitalizes the external and in-house legal costs and filing fees associated with obtaining patents on its new discoveries and amortizes these costs using the straight-line method over the shorter of the legal life of the patent or its economic life, generally 17 years, beginning on the date the patent is issued. The Company capitalized software development costs for products offered for sale in accordance with SFAS No. 86, *Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed*. This Standard allows for the capitalization of certain development costs once a software product has reached technological feasibility. Development costs capitalized totaled $0 in 2004 and 2003 and $1,127 in 2002.

Stock Based Compensation.

The Company accounts for its employee stock option grants under the provisions of Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employee*s, which utilizes the intrinsic value method. Accordingly, compensation cost for stock options is measured as the excess, if any, of the fair market value of the Company s common stock at the date of grant over the stock option exercise price. Stock option grants to non-employees are accounted for using the fair value method of accounting in accordance with SFAS No. 123, *Accounting for Stock-Based Compensation,* using the Black-Scholes model.

The following table illustrates the effect on net loss and loss per share if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock based employee compensation.

	2004	2003	2002
Net Loss:			
As reported	$ (34,372)	$ (22,958)	$ (21,365)
Pro forma	$ (35,432)	$ (24,794)	(23,274)
Basic and diluted loss per share:			
As reported	(1.19)	(0.94)	(0.91)
Pro forma	(1.22)	(1.01)	(0.99)

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 unlikely they will be realized.

Revenue Recognition.

Revenue on the sales of products is 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 sales terms do not provide for the right of return unless the product is damaged or defective. Revenues 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. The Company also enters into various service contracts that cover installed WAVE systems. These contracts cover specific time periods and revenue associated with these contracts is deferred and recognized over the service period. At December 31, 2004 and 2003, deferred revenue, mainly associated with the Company s service contracts, included on the Company s balance sheet was approximately $1,478 and $1,792 respectively.

Research and Development.

Research and development costs are charged to expense when incurred.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

Translation of Foreign Currency.

Financial statements of subsidiaries outside the U.S. are measured using the local currency as the functional currency. The adjustments to translate those amounts into U.S. dollars are accumulated in a separate account in stockholders equity and are included in other comprehensive income. Foreign currency transaction gains or losses resulting from changes in currency exchange rates are included in the determination of net income. Foreign currency transaction adjustments decreased net loss approximately $328 in 2004 and $1,089 in 2003 and 2002.

Comprehensive Income.

Accumulated other comprehensive income at December 31, 2004 and 2003 consisted of foreign currency translation adjustments, net of applicable tax of $0. For all previous periods presented, accumulated other comprehensive income consists of foreign currency translation adjustments and unrealized gains or losses on available for sale investments, net of applicable tax of $0. The Company deems its foreign investments to be permanent in nature and does not provide for taxes on currency translation adjustments arising from converting its investments in a foreign currency to U.S. dollars. There were no reclassification adjustments to be reported in the periods presented.

Fair Value of Financial Instruments.

The carrying amount of the Company s cash and cash equivalents, receivables, accounts payable and accrued expenses approximate fair value because of the short maturity of those instruments. The Company derives the fair value of its short-term investments based on quoted market prices. The carrying value of long-term debt and the line of credit approximates fair value based upon existing interest rates available to the Company for similar debt.

Earnings Per Share.

Basic earnings per share are 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 and warrants or conversion of convertible notes, where dilutive. Potentially dilutive securities totaling 13,484,072, 7,671,771 and 5,158,672 in 2004, 2003 and 2002, respectively, have been excluded from the computation of diluted earnings per share as they have an antidilutive effect due to the Company s net loss.

Recently Issued Accounting Pronouncements

On December 16, 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123R, Share-Based Payment. SFAS No.123R addresses the accounting for share-based payment transactions in which an enterprise receives employee services in exchange for (a) equity instruments of the enterprise or (b) liabilities that are based on the fair value of the enterprise s equity instruments or that may be settled by the issuace of such equity instruments. SFAS No. 123R eliminates the ability to account for share-based compensation transactions using Accounting Principles Board Opinion No. 25 and generally requires that such transactions be accounted for using a fair-value-based method. The Company expects to adopt this standard on January 1, 2006. The Company is currently assessing the final impact of this standard on its financial position, results of operations or cash flows. This assessment includes evaluating option valuation methodologies and assumptions as well as potential changes to compensation strategies.

On November 24, 2004, the FASB issued SFAS No. 151, Inventory Costs an amendment of ARB No. 43. SFAS No. 151 requires idle facility expenses, freight, handling costs, and wasted material (spoilage) costs to be excluded from the cost of inventory and expensed when incurred. It also requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. SFAS No. 151 will be effective at the beginning of 2006. The Company is currently assessing the final impact of this standard on its financial position, results of operations or cash flows.

Use of Estimates.

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America 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 revenues and expenses during the reporting period. Actual results could differ from those estimates.

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

B. INVENTORIES

Inventories consisted of the following at December 31:

	Biosystems Operating Segment		Nucleic Acids Operating Segment		Total	
	2004	2003	2004	2003	2004	2003
Finished goods	$ 2,637	$ 2,875	$ 2,380	$ 2,247	$ 5,017	$ 5,122
Raw materials and work in process	780	1,223	2,275	3,851	3,055	5,074
Demonstration inventory	153	388			153	388
	3,570	4,486	4,655	6,098	8,225	10,584
Less inventory classified as a long-term asset			2,859		2,859	
Net Inventory	$ 3,570	$ 4,486	$ 1,796	$ 6,098	$ 5,366	$ 10,584

The Nucleic Acids operating segment inventory at December 31, 2004 and 2003 consisted primarily of phosphoramadites and the raw materials to produce phosphoramadites which are used and produced at the Company s facility in Glasgow, Scotland. As of December 31, 2004, the Company has classified a portion of this inventory as a long-term other asset based on its existing sales forecasts for these products.

The Company periodically evaluates its inventory of chemical building blocks to determine whether they continue to meet quality and other specifications and over what time period such products are expected to be sold. Product that does not meet quality and other specifications can generally be re-worked to enhance purity. Costs to purify such product and related yield losses are expensed as incurred.

C. GOODWILL

At December 31, 2004 and 2003, goodwill by operating segment consist of the following:

	Biosystems Operating Segment	Nucleic Acids Operating Segment	Total
Net balance December 31, 2002	$ 638	$ 14,637	$ 15,275
Goodwill impairment charge		(4,772)	(4,772)
Net balance December 31, 2003	638	9,865	10,503
Goodwill impairment charge		(9,865)	(9,865)
Net Balance December 31, 2004	$ 638	$ 0	$ 638

The Company recorded charges of $9,865 and $4,772 during 2004 and 2003, respectively, related to the impairment of goodwill associated with the Nucleic Acids operating segment. In each case, the amount of the impairment charge was based, in part, on independent valuations performed by the same unaffiliated valuation firm. The 2003 charge resulted from the Company s annual impairment test that was performed in the fourth quarter of 2003. The 2004 charge resulted from an interim period impairment test performed during the second quarter of 2004.

The interim period impairment test became necessary after the Company s Board of Directors directed management during the second quarter of 2004 to explore strategic alternatives for the Nucleic Acids operating segment. This process included significant due diligence by management, third-party advisors and prospective independent buyers and other interested parties. Information obtained through this process indicated that it was more likely than not that the assets associated with the Nucleic Acids operating segment were impaired.

The Company also recorded a charge of $2,100 during the second quarter of 2004 related to the impairment of property and equipment associated with the Nucleic Acids operating segment.

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D. OTHER ASSETS

At December 31, 2004 and 2003, finite lived intangible assets and other assets consisted of the following:

	2004			2003		
	Cost	Accumulated Reserve	Net Book Value	Cost	Accumulated Reserve	Net Book Value
Capitalized software	$ 2,132	$ 1,468	$ 664	$ 2,132	$ 758	$ 1,374
Intellectual property	765	476	289	765	165	600
Patents	1,071	194	877	1,035	170	865
Deferred Financing Costs	576	183	393	409		409
Long Term Inventory	4,797	1,938	2,859			
Other	452	147	305	656	183	473
Total	$ 9,793	$ 4,406	$ 5,387	$ 4,997	$ 1,276	$ 3,721

Amortization expense for intangible assets was $1,197, $825 and $150 during 2004, 2003 and 2002, respectively. Amortization expense for intangible assets is expected to be approximately $1,009 in 2005, $342 in 2006, $320 in 2007, $62 in 2008 and $130 in 2009.

E. DEBT

Debt consisted of the following at December 31:

	2004	2003
Credit Line		
Gross amount due (2% above prime, due December 2006)	$ 5,948	$ 2,992
Debt premium	1,004	
Debt discount - warrants	(85)	(370)
Debt discount - beneficial conversion premium	(353)	(480)
	$ 6,514	$ 2,142
Long-Term Debt		
Convertible debt (2% above prime, due February 2007)	$ 2,550	$
Debt Premium	474	
Mortgage debt		1,693
Less current portion	(825)	(1,693)
	$ 2,199	$

In December 2003, the Company entered into a $7,500 line of credit (the Credit Line) with Laurus Master Fund, Ltd. (Laurus). The term of the Credit Line is three years carrying an interest rate of 2.0% over the prime rate or a minimum of 6.0% (7.25% at December 31, 2004). Funds available under the Credit Line are determined by a borrowing base equal to 90% of eligible accounts receivable balances plus up to $1,000 related to inventory balances. The Credit Line is secured by most of the Company s assets. Prior to amendments to the Credit Line discussed below, payment of interest and principal could, under certain circumstances, be made with shares of the Company s common stock at a fixed conversion price of $2.20 per share. Conversion of this debt to common stock may be made at the election of Laurus or the Company. The Company could elect to convert only if its shares trade at a price exceeding $2.42 per share for ten consecutive trading days, and such conversion is further subject to trading volume limitations and a limitation on the total beneficial ownership by Laurus of the Company s common stock. Upon entering into the Credit Line, the Company issued warrants to Laurus to acquire 550,000 shares of the Company s common stock at an exercise price exceeding the average trading price of the Company s common stock over the ten trading days prior to the date of the warrant. The amount available under the Credit Line at December 31, 2004 and 2003 was $1,552 and $4,508, respectively.

In February 2004, the Company entered into a separate $2,750 convertible note with Laurus (the Term Note). The Term Note carries an interest rate of 2.0% over the prime rate or a minimum of 6.0% (7.25% at December 31, 2004) and has a term of 3 years. Prior to amendments to the Term Note discussed below, the principal and interest on the Term Note could be converted into common stock of the Company at a fixed conversion price of $2.61 per share. Upon entering the Term Note, the Company issued warrants to Laurus to acquire 125,000 shares of its common stock. Borrowings under the Term Note were primarily used to retire the mortgage debt on the Company s Glasgow facility. Remaining borrowings of approximately $750 were used to complete the build-out of the Glasgow facility, complete the consolidation the Company s Glasgow operations into the new facility and provide funds for operations.

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Certain features of the Credit Line and Term Note (collectively, the Laurus Loans) require the Company to separately account for the value of certain amounts related to the warrants issued and the conversion feature of the Laurus Loans. Specifically, Emerging Issues Task Force (EITF) No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments,* requires the Company to separately value the warrants issued and the beneficial conversion premium related to the Laurus Loans. Any borrowings under the Credit Line may result in additional beneficial conversion premiums. The values of the warrants and the beneficial conversion premium have been recorded on the balance sheet as a debt discount and an increase to additional paid in capital. The debt discount recorded for these items will be amortized as expense to the income statement over the terms of the Laurus Loans or as the warrants are exercised or the debt is converted into common stock thereby increasing the effective interest rate on the Laurus Loans. In January and February 2004, Laurus exercised its conversion rights on the Credit Line and converted $2,000 of amounts outstanding on the Credit Line into approximately 910,000 shares of common stock of the Company. In connection with this conversion, the Company accelerated the amortization of approximately $480 of the beneficial conversion premium.

In February 2004, Laurus waived the borrowing base limitation on the Credit Line, thereby making the full $7,500 facility available to the Company regardless of the available collateral. On August 31, 2004, Laurus agreed to extend the borrowing base waiver on the Credit Line through March 19, 2005. In addition, Laurus deferred certain payments due under the Term Note and reduced the interest rate on both of the Laurus Loans to 0% for any day the closing sale price of the Company s common stock is at or above $1.75 per share. In return, the Company lowered the conversion price on each of the Laurus Loans to $1.00 per share and issued a warrant to Laurus covering an additional 400,000 common shares at an exercise price of $1.25 per share. The closing price of the Company s common stock on August 31, 2004 was $1.20 per share.

The August 31, 2004 Laurus modifications were treated as extinguishments for financial reporting purposes since the change in present value of expected cash flows between the original and modified agreements is greater than 10%. As such, the Company recorded a loss on extinguishment of debt of $2,859 at August 31, 2004 reflecting the difference between (i) the recorded amount of debt, net of related discounts, of $7,427 and (ii) the fair value of the new debt instrument of $10,287 plus the fair value of the new warrants of $111. The difference between the fair value of the new debt of $10,287 and the face value of the debt of $8,572 represents a premium, which will be reflected as a reduction of interest expense over the life of the new debt.

Prospectively, draws on the Credit Line may result in beneficial conversion charges to the extent the price of the Company s common stock exceeds the conversion price on the day of the draw. Such beneficial charges will be amortized as expense to the income statement during the period the draw remains outstanding or up to the point the debt is converted into common stock thereby increasing the effective interest rate on the Credit Line.

Principal repayments under the Term Note are scheduled as follows: $850 in 2005, $900 in 2006, and $800 in 2007.

Amortization of debt premiums and discounts totaled $1,644 during 2004 and $0 in each 2003 and 2002 and is reflected as interest expense in the accompanying statement of operations.

During 2002, Cruachem Ltd., a wholly owned subsidiary of the Company, entered into a mortgage loan with The Royal Bank of Scotland. The original principal amount of the loan was £1.0 million. Principal and interest were payable in quarterly installments. The loan carried a 15-year term and a fixed annual interest rate of 6.77%. Security for this loan was the Company s 45,000 square foot manufacturing facility located in Glasgow, Scotland. The loan carried certain financial and non-financial covenants that included a minimum net cash flow requirement. The net book value of the facility was approximately $2,000 at December 31, 2003. During February 2004, the Company repaid the principal balance of the mortgage loan and therefore, the Company included the entire outstanding principal balance of this loan at December 31, 2003 within current liabilities.

F. COMMITMENTS AND CONTINGENCIES

The Company has been named as a defendant in a lawsuit filed in Spain by a prospective distributor who claims that the Company breached a promise to grant the plaintiff a distributorship for certain of the Company s products in a specific geographic area in Europe. The plaintiff is seeking monetary relief of approximately $500. The Company believes the lawsuit is without merit and intends to vigorously defend this matter.

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The Company is subject to a number of other claims of various amounts, which arise out of the normal course of business. In the opinion of management, the disposition of all claims currently pending will not have a material adverse effect on the Company s financial position, results of operations or cash flows, after considering amounts already reflected in the consolidated financial statements.

The Company leases certain equipment, vehicles and operating facilities. The Company s leases related to its operating facilities currently expire on various dates through 2010. At December 31, 2004, the future minimum lease payments required under non-cancellable lease provisions are approximately $1,958 in 2005, $1,382 in 2006, $486 in 2007, $187 in 2008, $191 in 2009, and $181 in 2010. Rent expense related to all operating leases for the years ended December 31, 2004, 2003 and 2002 was approximately $2,007, $2,487 and $2,266, respectively.

At December 31, 2004, the Company had firm commitments totaling $798 to a vendor to purchase components used in WAVE Systems.

G. INCOME TAXES

Loss before income taxes consists of the following:

	Years ended December 31,		
	2004	2003	2002
United States	$ (30,467)	$ (19,809)	$ (19,640)
International	(3,999)	(3,084)	(1,620)
	$ (34,466)	$ (22,893)	$ (21,260)

The Company s provision for income taxes for the years ended December 31, 2004, 2003 and 2002 differs from the amounts determined by applying the statutory Federal income tax rate to loss before income taxes for the following reasons:

	2004	2003	2002
Benefit at Federal Rate	$ (11,718)	$ (7,784)	$ (7,228)
Increase (decrease) resulting from:			
State income taxes net of federal benefit	(595)	(485)	(518)
Foreign subsidiary tax rate difference	493	427	224
Research and development tax credit	(141)	(250)	(188)
Impairment charges	3,569		
Other net	78	82	137
Valuation allowance	8,220	8,075	7,678
Total income tax expense (benefit)	$ (94)	$ 65	$ 105

The Company s deferred income tax asset at December 31, 2004 and 2003 is comprised of the following temporary differences:

	2004	2003
Net operating loss carryforward	$ 35,587	$ 29,292
Research and development credit carryforwards	1,328	1,188
Deferred revenue	708	400
Accrued vacation	81	134
Other	583	(422)
	38,287	30,592
Less valuation allowance	(38,287)	(30,592)
	$	$

At December 31, 2004, the Company had total used federal tax net operating loss carryforwards of $91,474 of which $1,770 expire in 2008, $3,698 expire in 2009, $2,970 expire in 2010, $943 expire in 2011, $3,425 expire in 2012, $1,838 expire in 2018, $8,182 expire in 2019, $9,662 expire in 2020, $8,228 expire in 2021, $16,862 expire in 2022; $16,173 expire in 2023 and $17,723

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expire in 2024. Of these federal net operating loss carryforwards, $11,820 were obtained in the acquisition of Annovis, Inc. and may be subject to certain restrictions. At December 31, 2004, the Company had unused state tax net operating loss carryforwards of approximately $37,619 that expire at various times between 2005 and 2024. At December 31, 2004, the Company had unused research and development credit carryforwards of $1,328 that expire at various times between 2008 and 2024. A valuation allowance has been provided for the remaining deferred tax assets, due to the Company s cumulative losses in recent years, expected losses in future years and an inability to utilize any additional losses as carrybacks. The Company will continue to assess the recoverability of deferred tax assets and the related valuation allowance. To the extent the Company begins 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.

H. EMPLOYEE BENEFIT PLAN

The Company maintains an employee 401(k) retirement savings plan that allows for voluntary contributions into designated investment funds by eligible employees. The Company matches the employees contributions at the rate of 50% on the first 6% of contributions. The Company may at the discretion of its Board of Directors, make additional contributions on behalf of the Plan s participants. Company contributions were approximately $500 for each of the three years ended December 31, 2004.

I. STOCKHOLDERS EQUITY

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.

Common Stock.

During 2004, the Company issued 1,134,850 shares of common stock in conjunction with conversions under the Laurus Loans.

Date	Price	Shares Issued	Net Proceeds	Facility	Applied To
January 2004	$ 2.20	650,000	$ 1,422	Credit Line	Principal
February 2004	$ 2.20	259,091	570	Credit Line	Principal
December 2004	$ 1.00	150,000	146	Term Note	Principal
December 2004	$ 1.00	75,759	72	Term Note	Interest
		1,134,850	$ 2,210		

In September 2003, the Company issued 1,780,000 shares of its common stock and in November 2003, the Company issued 2,720,000 shares of its common stock in privately-negotiated sales. These shares were sold pursuant to the terms of a Securities Purchase Agreement, dated August 27, 2003. The sale of these shares was exempt from registration under the Securities Act of 1933, as amended (the Securities Act) as a sale not involving a public offering. These shares have been registered for resale under the Securities Act. The net proceeds to the Company, after payment of transaction fees and other expenses of the offering, were approximately $4,202.

In May 2001, Company shareholders approved the adoption of the Transgenomic, Inc. 2001 Employee Stock Purchase Plan that was subsequently implemented in November 2001. Substantially all of the Company s U.S. employees are eligible to participate in the Plan. Eligible employees authorize payroll deductions to be made for the purchase of shares. Such deductions are accumulated during

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a defined participation period at the end of which each participant is deemed to have been granted an option to purchase shares of stock from the Company at 85% of the fair market value of the Company stock as measured by the closing price of the stock on either the first or last business day of the participation period, whichever is lower. The number of shares purchased under the option is based upon the participants elected withholding amount. At the end of the participation period such option is automatically exercised. This plan is structured to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended. During 2004, 2003 and 2002 there were 76,902, 107,077 and 56,842 shares issued under this plan, respectively.

Common Stock Warrants.

The following is a summary of the 1,159,421 common stock warrants outstanding at December 31, 2004. No warrants expired or were exercised during 2004.

Warrant Holder	Issue Year	Expiration Year	Underlying Shares	Exercise Price
Laurus Master Fund, Ltd. (1)	2003	2010	200,000	$ 2.25
Laurus Master Fund, Ltd. (1)	2003	2010	200,000	$ 2.44
Laurus Master Fund, Ltd. (1)	2003	2010	150,000	$ 2.32
Laurus Master Fund, Ltd. (1)	2004	2011	125,000	$ 3.11
Laurus Master Fund, Ltd. (1)	2004	2011	400,000	$ 1.25
TN Capital Equities, Ltd. (1)	2003	2008	45,918	$ 2.94
TN Capital Equities, Ltd. (1)	2004	2009	15,566	$ 3.18
GE Capital (2)	2002	2007	13,762	$ 3.27
GE Capital (2)	2003	2008	9,175	$ 3.27

(1) These warrants were issued in conjunction with the Laurus Loans and subsequent modifications. Refer to Note E.
(2) These warrants were issued in conjunction with operating leases with GE Capital. While the leases have since been terminated, the warrants are still outstanding.

J. STOCK OPTIONS

The Company s 1997 Stock Option Plan, as amended (the Stock Option Plan), allows the Company to grant both incentive stock options and nonqualified stock options to acquire shares of the Company s common stock to employees and directors of the Company and to nonemployee advisors. 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. The maximum number of shares for which options may be granted under the Stock Option Plan is 7,000,000. The Stock Option 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 options granted under the Stock Option Plan, subject to the terms thereof. The options must be granted at exercise prices not less than the fair market value of the common stock on the date of the grant. Generally, the stock options vest at a rate of either 20% per year over a five-year period or 33 1/3% per year over a three-year period and expire 10 years after the date the option was granted. If the option holder ceases to be employed by the Company, the Company will have the right to terminate any outstanding but unexercised options.

The following table summarizes activity under the Stock Option Plan during the three years ended December 31, 2004:

	Number of Options	Weighted Average Exercise Price
Balance at January 1, 2002	5,133,831	6.90
Granted	632,000	5.09
Exercised	(81,900)	5.01
Forfeited	(539,021)	7.69
Balance at December 31, 2002:	5,144,910	6.62
Granted	1,282,000	1.64
Exercised		
Forfeited	(733,994)	7.25
Balance at December 31, 2003:	5,692,916	6.62
Granted	360,000	1.70
Exercised		
Forfeited	(964,879)	5.24
Balance at December 31, 2004:	5,088,037	$ 5.09
Exercisable at December 31, 2004	4,214,214	$ 5.55

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The weighted average fair value per share of options granted in 2004, 2003 and 2002 was $0.40, $0.93 and $2.92, respectively.

The Company has elected to follow the measurement provisions of APB No. 25, under which no recognition of expense is required in accounting for stock options granted to employees for which the exercise price equals or exceeds the deemed fair market value of the stock at the grant date. In those cases where options have been granted with an exercise price below the deemed fair market value, the Company recognizes compensation expense using the straight-line method over the vesting periods of the individual stock options.

Stock-based compensation expense recorded by the Company represents amortization of unearned compensation related to options granted to employees with an exercise price less than the deemed fair market value at the date of grant and options granted to non-employees. During 2004, 2003 and 2002, the Company recorded compensation expense of $0, $93 and $131, respectively. The expense amounts were calculated using the Black-Scholes option pricing model with the following assumptions: no common stock dividends, risk-free interest rates ranging from 3.10% to 6.53%; volatility ranging from 35% to 85%; and an expected option life of 1 to 7.5 years.

The following table summarizes information about options outstanding as of December 31, 2004:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
$ 1.00 $ 1.30	408,335	6.8	$ 1.30	155,011	$ 1.30
$ 1.31 $ 2.60	1,009,167	7.9	$ 1.89	551,850	$ 1.90
$ 2.61 $ 3.90	50,002	5.5	$ 2.90	38,336	$ 2.90
$ 3.91 $ 5.20	2,142,200	3.0	$ 5.00	2,142,200	$ 5.00
$ 5.21 $ 6.50	768,182	6.1	$ 6.16	692,633	$ 6.15
$ 6.51 $ 9.10	10,000	6.4	$ 9.00	10,000	$ 9.00
$ 9.11 $10.40	396,420	5.6	$ 9.88	358,253	$ 9.88

$10.41	$13.00	303,731	5.2	$ 12.80	265,931	$ 12.81
		5,088,037	5.1	$ 5.09	4,214,214	$ 5.55

K. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION

The Company operates in two reportable segments, BioSystems and Nucleic Acids. Operations for these segments are evaluated based upon specific identification of revenues and expenses associated with the business activities resulting in a segment operating income. Expenses that cannot be directly identified to an operating activity or are considered corporate overhead are not allocated to the segments in arriving at operating income for the segment. Generally, decisions regarding asset allocation, financing, taxes or other items impacting the Company s Balance Sheet are made at the corporate level and, accordingly, operating segment Balance Sheet information is not typically reviewed by operating decision makers.

The BioSystems operating segment generates revenue from the sale of automated instrument systems and associated consumable products and services. This segments products are based upon two of the Company s three core competencies, separations chemistries and enzymology. Specifically, this segment s main products are the WAVE system, related bioconsumables and research services.

The Nucleic Acids operating segment generates revenue from the sale of products and services based upon all three of the Company s core competencies, nucleic acid chemistries, separations chemistries and enzymology. Specifically, this segments main products are nucleic acid building blocks or phosphoramidites , fluorescent markers, dyes and associated reagents and novel chemistry and process development services.

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The following is information for net sales and operating income by segment.

	2004	2003	2002
Net Sales			
BioSystems	$ 25,243	$ 26,044	$ 24,235
Nucleic Acids	8,546	7,822	13,319
Total	$ 33,789	$ 33,866	$ 37,554
Loss from operations			
BioSystems	$ (2,294)	$ (2,786)	$ (9,417)
Nucleic Acids	(17,623)	(12,440)	(1,004)
Corporate	(9,143)	(7,362)	(11,276)
Total	$ (29,060)	$ (22,588)	$ (21,697)

During 2004, sales to Geron Corporation totaled $4,151 and represented 49% of net sales within our Nucleic Acids operating segment and 12% of total consolidated net sales. During 2003 and 2002 no single customer accounted for more than 10% of operating segment or consolidated net sales.

The following is information for fixed assets and fixed asset additions by segment. Fixed assets are tracked by location and department and thus can be identified to operating segments even though specific segment Balance Sheets are not produced.

	2004	2003
Fixed Assets		
BioSystems	$ 2,695	$ 3,412
Nucleic Acids	10,150	13,991

Corporate	680	1,301
Total	$ 13,525	$ 18,704
Fixed Asset Additions		
BioSystems	$ 901	$ 1,000
Nucleic Acids	848	5,393
Corporate	9	20
Total	$ 1,758	$ 6,413

The following is supplemental information for net sales by geographic area.

	2004	2003	2002
Sales by Geographic Area:			
United States	$ 13,580	$ 12,251	$ 16,805
Europe	15,392	15,955	16,011
Pacific Rim	2,794	3,335	4,129
Other	2,023	2,325	609
Total	$ 33,789	$ 33,866	$ 37,554

Long-lived assets by geographic area as of December 31 are as follows:

	2004	2003
United States	$ 7,754	$ 20,935
Europe	7,564	9,705
Pacific Rim	11	32
Total	$ 15,329	$ 30,672

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L. QUARTERLY RESULTS (UNAUDITED)

The following table contains selected unaudited consolidated statements of operations data for each quarter for fiscal years 2004 and 2003.

	2004				
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Net Sales	$ 8,629	$ 9,011	$ 8,194	$ 7,955	$ 33,789
Gross Profit	$ 2,861	$ 3,153	$ 1,337	$ 1,842	$ 9,193
Net loss	$ (3,859)	$ (15,132)	$ (8,442)	$ (6,939)	$ (34,372)
Basic & Diluted Loss Per Share	$ (0.13)	$ (0.52)	$ (0.29)	$ (0.24)	$ (1.19)
Basic and Diluted Weighted Average Shares Outstanding	28,728	29,053	29,078	29,338	29,006

	2003				
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Net Sales	$ 9,505	$ 8,481	$ 7,537	$ 8,343	$ 33,866
Gross Profit	$ 3,691	$ 2,556	$ 775	$ 2,529	$ 9,551
Net loss	$ (3,596)	$ (4,670)	$ (6,097)	$ (8,595)	$ (22,958)
Basic & Diluted Loss Per Share	$ (0.15)	$ (0.20)	$ (0.25)	$ (0.32)	$ (0.94)
Basic and Diluted Weighted Average Shares Outstanding	23,519	23,540	24,177	26,723	24,484

Earnings per share are computed independently for each of the quarters presented. Therefore, the sum of the quarterly per share losses may not equal the annual loss per share.

M. SALE OF SPECIALTY OLIGONUCLEOTIDE MANUFACTURING FACILITY

On November 11, 2004, the Company sold the assets associated with its specialty oligonucleotides manufacturing facility in Boulder, Colorado to a subsidiary of Eyetech Pharmaceuticals, Inc. (Eyetech). The sale price was $3,000 in cash plus the assumption of the lease on the Boulder facility and of certain equipment leases with a gross value of $2,377. Substantially all of the 27 employees at the Boulder facility became Eyetech employees. Net proceeds from the sale (after transaction expenses and fees paid to our investment advisors) equaled approximately $2,700. In conjunction with this transaction, we recorded a gain on sale of $1,466 in the fourth quarter of 2004.

N. RESTRUCTURING PLANS

On November 13, 2004, the Company s Board of Directors approved a restructuring plan designed to refocus on the BioSystems operating segment and to better align the Company s cost structure with anticipated revenues. The plan (which is incremental to the sale of the specialty oligonucleotide manufacturing facility in Boulder, Colorado facility) included a workforce reduction of approximately 60 positions and the closure of two domestic research and development facilities associated with our Nucleic Acids operating segment and two European field offices. Additionally, the Company eliminated approximately 10 positions at its chemical building blocks manufacturing facility in Glasgow, Scotland. In conjunction with these changes, the Company incurred a charge of $3,570 during the quarter ending December 31, 2004 consisting of severance benefits of $1,406, future rents on closed facilities (net of projected sublease rents) of $1,241, the write-off property and equipment specifically attributable to closed facilities of $740 and other costs of $183. The Company had accrued expenses associated with this restructuring plan of $1,909 at December 31, 2004 of which $1,486 is expected to be paid 2005 and $423 in 2006.

During the fourth quarter of 2002 management formulated and executed a significant portion of a restructuring plan. The plan was developed to reduce expenses thereby better aligning the Company s expense structure with current business prospects. The plan included employee terminations, office closures, termination of collaborations and write-offs of abandoned intellectual property. Specifically, in the fourth quarter of 2002 the Company notified approximately 60 employees of their termination, notified landlords of our intent to close four facilities and reduce our space commitment under lease at two other facilities, terminated certain consulting and collaboration agreements and abandoned certain patents. As a result of the plan $3,282 in restructuring charges were recorded and are included in operating expenses. These charges consisted of approximately $775 of employee severance costs, $1,200 in office

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TRANSGENOMIC, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Years Ended December 31, 2004, 2003 and 2002

(Dollars in thousands except per share data)

closure related costs, $400 of collaboration and other agreement termination charges and $900 in write-offs of abandoned intellectual property. Approximately 45% of the total charges were for non-cash items. Additional restructuring charges totaling $741 were incurred in the first half of 2003. The Company had accrued expenses associated with these restructuring activities of $0 at December 31, 2004 and $227 at December 31, 2003.

O. SUBSEQUENT EVENTS

On March 18, 2005, Laurus agreed to further extend the borrowing base waiver on the Credit Line until March 31, 2006. In connection with this waiver, the Company agreed to allow Laurus to convert $1,872 of the outstanding principal balance under the Credit Line into 3,600,000 shares of its common stock. In addition, on March 24, 2005 the Company agreed to allow Laurus to convert $650 of the outstanding principal balance of the Term Note into 1,250,000 shares of common stock. As a result, the Company increased the amount available under the Credit Line by $1,872 and eliminated substantially all remaining 2005 scheduled principal payments on the Term Loan.

P. RESTATEMENT OF STATEMENTS OF CONSOLIDATED CASH FLOWS

Subsequent to the issuance of the Company s financial statements for the year ended December 31, 2004, the Company s management determined that it had incorrectly included the amortization of software development costs within net cash flows from investing activities rather than within net cash flows from operating activities. The Company s management also determined that restricted common stock accepted as payment for goods and services from one of the Company s customers and subsequently sold was incorrectly classified within the consolidated statements of cash flows. It is the Company s policy to account for restricted common stock received in settlement of a customer s accounts receivable as available for sale securities. The sale of such securities should be reflected in the consolidated statements of cash flows as an investing activity. Available for sale securities acquired for goods and services should be reflected as supplemental non-cash transactions.

As a result, the Company s consolidated statements of cash flows for the fiscal years ended December 31, 2004 and 2003 have been restated from the amounts previously reported to correct these errors. This restatement had no impact on the statements of consolidated cash flows for the fiscal year ended December 31, 2002. In addition, this restatement had no impact on the Company s consolidated balance sheets or consolidated statements of operations. The impact of this restatement on the consolidated statements of cash flows is as follows (dollars in thousands):

	2004 As Previously Reported	2004 As Restated	2003 As Previously Reported	2003 As Restated
Depreciation and amortization	4,009	4,625	3,981	4,597
Trading securities acquired in settlement of accounts receivable	(4,397)		(1,843)	
Proceeds from sales of trading securities	4,269		1,907	1,519
Purchase of trading securities				(1,566)
Accounts receivable	1,063	(3,334)	619	342
Net cash flows from operating activities	(9,101)	(12,754)	(13,245)	(13,017)
Proceeds from the maturities and sale of available for sale securities		4,269	3,612	4,000
Change in other assets	1,138	522	73	(543)
Net cash flows from investing activities	2,380	6,033	(2,719)	(2,947)

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Item 9A. Controls and Procedures

A review and evaluation was performed by the Company s management, including the Company s Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of the Company s disclosure controls and procedures as of the end of the period covered by this annual report. Based on that review and evaluation, the CEO and CFO concluded that the Company s disclosure controls and procedures, as designed and implemented, were effective. There have been no changes in the Company s internal controls subsequent to the date of their evaluation.

This review and evaluation took into account the restatements described in Note P to the accompanying consolidated financial statements and, after considering the nature of and the isolated effects of such restatements on the consolidated statements of cash flows and the controls underlying the accumulation of the related information, the Company s management has concluded that the restatement was not the result of a material weakness in internal control over financial reporting.

Part IV

Item 15. Exhibits and Financial Statement Schedules.

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

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

Report of Independent Registered Public Accounting Firm.

Consolidated Balance Sheets of the Registrant and Subsidiaries as of December 31, 2004 and 2003.

Consolidated Statements of Operations of the Registrant and Subsidiaries for the years ended December 31, 2004, 2003 and 2002.

Consolidated Statements of Stockholders Equity (Deficit) of the Registrant and Subsidiaries for the years ended December 31, 2004, 2003 and 2002.

Consolidated Statements of Cash Flows of the Registrant and Subsidiaries for the years ended December 31, 2004 (restated), 2003 (restated) and 2002.

Notes to Consolidated Financial Statements of the Registrant and Subsidiaries.

2. Financial Statement Schedules. The following financial statement scheduled is included in response to Item 8 of this report:

Schedule II-Valuation and Qualifying Accounts

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:

2.1 Agreement and Plan of Merger, dated as of April 30, 2001, by and among Registrant, TBIO Nebraska, Inc., TBIO, Inc. and Annovis, Inc. (incorporated by reference to Exhibit 2.1 to Registrant s Report on Form 8-K filed on May 31, 2001)

2.2 Addendum to Agreement and Plan of Merger, dated as of May 18, 2001, by and among Registrant, TBIO Nebraska, Inc., TBIO, Inc. and Annovis, Inc. (incorporated by reference to Exhibit 2.2 to Registrant s Report on Form 8-K filed on May 31, 2001)

2.3 Asset Purchase Agreement, dated as of November 8, 2004, by and between Registrant and Eyetech Boulder Inc. (incorporated by reference to Exhibit 2.3 to Registrant s Report on Form 10-K (Registration No. 000-30975) filed on April 15, 2005)

3.1 Second Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 2 to Amendment No. 1 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on May 17, 2000)

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)

4.1 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 Fourth Amended and Restated 1997 Stock Option Plan of the Registrant (incorporated by reference to Exhibit 10.1 to Registrant s Report on Form 10-K (Registration No. 000-30975) filed on April 15, 2005)

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)

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10.4 Employment Agreement, dated April 1, 2000, by and between the Registrant and Collin J. D Silva (incorporated by reference to Exhibit 10.8 to Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000)

10.5 Amendment No. 1 to the Employment Agreement, effective March 1, 2000, by and between Transgenomic, Inc. and Collin D Silva (incorporated by reference to Exhibit 10.9 of the Registrant s Quarterly Report on Form 10-Q filed on May 17, 2004)

10.6 Employment Agreement, effective July 31, 2004, by and between Transgenomic, Inc. and Michael A. Summers (incorporated by reference to Exhibit 10.11 to Registrant s Quarterly Report on Form 10-Q filed on November 15, 2004).

10.7 Employment Agreement, dated January 22, 2002, between the Registrant and Keith A. Johnson (incorporated by reference to Exhibit 10.1 to Registrant s Quarterly Report on Form 10-Q filed on May 14, 2002)

10.8 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)

10.9 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)

10.10 License Agreement, dated December 1, 1989, between Cruachem Holdings Ltd. (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)

10.11 Sublicense Agreement, dated October 1, 1991, between Cruachem Holdings Ltd. (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)

10.12 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)

10.13 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)

10.14 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)

10.15 Form of Securities Purchase Agreement by and between the Registrant and various counterparties, dated August 27, 2003 (incorporated by reference to Exhibit 10 to the Registrant s Report on Form 8-K filed on August 29, 2003)

10.16 Securities Purchase Agreement by and between the Registrant and Geron Corporation, dated June 2, 2003 (incorporated by reference to Exhibit 10.0 to Amendment No. 3 to Registration Statement on Form S-3 (Registration No. 333-108319) as filed on October 14, 2003)

10.17 Security Agreement by and between the Registrant and Laurus Master Fund, Ltd., dated December 3, 2003 (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-111442) filed on December 22, 2003)

10.18 Amendment to Security Agreement and Related Documents by and between the Registrant and Laurus Master Fund, Ltd., dated August 31, 2002 (incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-3 (Registration No. 333-118970) as filed on September 14, 2004)

10.19 Secured Revolving Note by and between the Registrant and Laurus Master Fund, Ltd., dated December 3, 2003 (incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-111442) filed on December 22, 2003)

10.20 Secured Convertible Minimum Borrowing Note by and between the Registrant and Laurus Master Fund, Ltd., dated December 3, 2003 (incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-111442) filed on December 22, 2003)

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10.21 Secured Convertible Minimum Borrowing Note Series B by and between the Registrant and Laurus Master Fund, Ltd., dated December 3, 2003, as amended on April 15, 2004 (incorporated by reference to the Registration Statement 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 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)

10.23 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)

10.24 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)

10.25 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)

10.26 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)

10.27 Secured Convertible Term Note 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 10.2 to the Registration Statement on Form S-3 of the Registrant (Registration No. 333-114661) filed on April 21, 2004)

10.28 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)

10.29 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)

10.30 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)

10.31 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)

10.32 Engagement Agreement by and between the Registrant and Goldsmith, Agio, Helms Securities, Inc., dated March 19, 2004, as amended August 12, 2004 (incorporated by reference to Exhibit 10.10 to Registrant s Quarterly Report on Form 10-Q filed on November 15, 2004)

23 Consent of Independent Registered Public Accounting Firm

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 amended report to be signed on its behalf by the undersigned, thereunto duly authorized on this 26th day of May 2005.

TRANSGENOMIC, INC.

By: /s/ COLLIN J. D SILVA

Collin J. D Silva,

Chairman and Chief Executive Officer

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, this amended report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on this 26th day of May 2005.

Signature	Title
/s/ COLLIN J. D SILVA Collin J. D Silva	Chairman of the Board, Director and Chief Executive Officer (Principal Executive Officer)
/s/ MICHAEL A. SUMMERS Michael A. Summers	Chief Financial Officer (Principal Financial Officer)
/s/ GREGORY J. DUMAN* Gregory J. Duman	Director
/s/ JEFFREY SKLAR* Jeffrey Sklar	Director
/s/ ROLAND J. SANTONI* Roland J. Santoni	Director
/s/ PARAG SAXENA* Parag Saxena	Director
/s/ GREGORY T. SLOMA* Gregory T. Sloma	Director

*By Collin J. D Silva, as attorney-in-fact

/s/ COLLIN J. D SILVA

Collin J. D Silva

Attorney-in-fact for the individuals as indicated.

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Schedule II Valuation And Qualifying Accounts

(dollars in thousands)

	Beginning Balance	Additional Charges to Income	Deductions from Reserve	Ending Balance
Allowance for Bad Debts:				
Year Ended December 31, 2004	$ 549	$ 534	$ 32	$ 1,051
Year Ended December 31, 2003	$ 450	$ 174	$ 75	$ 549
Year Ended December 31, 2002	$ 213	$ 418	$ 181	$ 450