

INTERLEUKIN GENETICS INC  
Form 10-K  
March 16, 2006

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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## FORM 10-K

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES AND EXCHANGE ACT  
OF 1934

For the fiscal year ended December 31, 2005

Commission File Number: 001-32715

## INTERLEUKIN GENETICS, INC.

(Name of Registrant in its Charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)  
**135 Beaver Street, Waltham, MA**  
(Address of principal executive offices)

**94-3123681**  
(I.R.S. Employer  
Identification No.)  
**02452**  
(Zip Code)

Registrant's Telephone Number: (781) 398-0700

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

**Common Stock, \$0.001 par value per share**

**American Stock Exchange  
and  
Boston Stock Exchange**

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

**Common Stock, \$0.001 par value per share**

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

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

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  NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained in this form and will not be contained, to the best of the 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.

## Edgar Filing: INTERLEUKIN GENETICS INC - Form 10-K

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer" and "large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer .

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES  NO

The aggregate market value of the registrant's voting and non-voting common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) computed by reference to the price at which the common stock was last sold as of the last business day of the registrant's most recently completed second fiscal quarter was \$68,751,859.

As of February 28, 2006 there were 24,034,060 shares of the registrant's Common Stock and 5,000,000 shares of the registrant's Series A Preferred Stock, issued and outstanding.

### **Documents Incorporated By Reference**

Portions of the registrant's Definitive Proxy Statement for the 2006 Annual Meeting of Shareholders to be held on or about June 13, 2006, are incorporated by reference in Part III hereof.

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### Forward Looking Statements

This report on Form 10-K and the documents incorporated by reference within this document contain certain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act. Statements contained in this report that are not statements of historical fact may be deemed to be forward-looking statements. Words or phrases such as *will likely result*, *expect*, *will continue*, *anticipate*, *estimate*, *intend*, *plan*, *project*, *outlook*, or similar expressions identify forward-looking statements. Forward-looking statements address or may address the following subjects:

- **The sufficiency of our current cash resources, together with additional research agreements, anticipated revenue from product launches and other arrangements to fund operations through mid-2007;**
- **Our expectation that we will receive \$2.5 million in funding through March 2007 from an affiliate of Alticor under the terms of various research agreements with this affiliate;**
- **Our expectation that we will receive genetic risk assessment testing revenue and/or small royalty payments from affiliates of Alticor;**
- **Our expectation that we may sign additional research agreements with affiliates of Alticor, or other third parties;**
- **Our expectation of the benefits that will result from the ongoing research programs that outside parties are conducting on our behalf;**
- **Any expectation we may have regarding the success of developing products, the timing of releasing products for sale or the success of these products when they are released;**
- **Any expectation we may have of attracting business partners to assist in developing, marketing or distribution of our products;**
- **Any expectation that certain healthcare related trends will emerge or continue that will support our business model;**
- **Our expectation that our total research and development costs will be between \$3.0 million and \$3.5 million for the year ended December 31, 2006;**
- **Our expectation that we might derive benefit from our patented intellectual property; and**
- **Our expectation that we will continue to experience losses until our genetic risk assessment testing revenue grows substantially from current levels.**

Actual results may vary materially from those expressed in forward-looking statements. Factors that could cause actual results to differ from expectations include but are not limited to; risks related to market acceptance of genetic risk assessment tests in general and our products in particular, risks related to technology and product obsolescence, delays in development of products, dependence on third parties, our ability to fund operations through mid-2007, competitive risks and those risks set forth within the section titled **Risk Factors** beginning on page 17 within this report. We cannot be certain that our results will not be adversely affected by one or more of these factors or by other factors not currently anticipated. All information set forth in this Form 10-K is as of the date of this Form 10-K. Unless required by law we accept no responsibility to update this information.

INTERLEUKIN GENETICS, INC.

FORM 10-K

FOR THE YEAR ENDED DECEMBER 31, 2005

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**PART I**

**Item 1.** *Business*

**Overview**

Interleukin Genetics, Inc. is a Delaware corporation. We are a personalized health company primarily focused on the role that genetically determined variations in the inflammatory response has on health and disease. Our mission is to develop tests and products that can help individuals improve and maintain their health through preventive measures. We plan to achieve our objective by developing:

- genetic risk assessment tests;
- preventive (or ameliorative) nutritional products for those individuals at risk; and
- personalized therapeutics (drug development based in part on genetic information).

We plan to establish a leadership position in personalized health. We believe that by identifying individuals whose risk for certain chronic diseases is potentially increased due to variants in one or more genes and combining this knowledge with personalized interventions, we can help individuals improve their health outcomes. We have a portfolio of patents covering the influence of certain gene variations on risk for a number of common chronic diseases and conditions.

We believe that one of the great challenges confronting medicine today is to understand why some people are more prone than others to developing serious chronic diseases and why some people respond to treatments for those diseases differently than others. Until doctors are able to understand the underlying causes of such variability, the practice of medicine will remain largely constrained to the current approach of prescribing therapies based on broad, sweeping recommendations in which very different individuals receive the same treatment.

Until now, scientific study of chronic diseases has largely focused on identifying factors that cause a disease. Common examples of such factors include high levels of cholesterol in the case of heart disease, bacteria in the case of periodontal disease and reduced estrogen levels in the case of osteoporosis. However, the mere presence of these initiating factors does not necessarily mean a person will develop a disease. For example, not everyone with a chronically elevated level of cholesterol develops heart disease, nor does everyone with a normal cholesterol level avoid heart disease. Common diseases arise in part as a result of how our bodies respond to various environmental factors.

In March 2003, we entered into a broad strategic alliance with the Alticor Inc. family of companies (Alticor) to develop and market personalized nutritional and skin care products. Alticor has a long history of manufacturing and distributing nutritional supplements and skin care products to a worldwide market. To date we have done little in the skin care field. We are currently devoting most of our resources to the support of our collaboration with Alticor which includes the development of our genetic risk assessment tests.

A small portion of our resources is being devoted to the development of a new (non-drug) product for the periodontal market. Thus far, our non-research revenue has consisted primarily of minimal royalties from our periodontitis genetic risk assessment test known as PST®. This test is not offered through the Alticor channel. We expect to incur losses as we continue to develop our new tests and products.

We believe that the ability to obtain detailed knowledge of an individual's genetic information, the recent developments in the understanding of inflammation, and an aging baby boomer generation have converged to create an opportunity for us to leverage our core technology into a new approach in healthcare called personalized wellness.

## **Inflammation**

One of the many benefits from the sequencing of the human genome is a new understanding of the importance of single nucleotide polymorphisms (SNPs). Once used as a tool to help scientists decipher the human genome, SNP analysis now is an important tool used to study the relevance of genetic variations to human health. A variation in a common SNP may cause a gene to make a variant protein that leads to a discernible physiological impact. We have focused on the SNP variations associated with inflammation and have over the years conducted clinical studies involving over 20,000 individuals. During the last decade we have worked with the University of Sheffield (Sheffield) in the United Kingdom, to identify several SNPs (gene variations) that influence the body's inflammatory response.

Inflammation is one of the body's most ancient protective mechanisms. Over the last dozen years, understanding of the role of inflammation in several diseases has increased. It is now accepted that many chronic diseases begin with a challenge to the tissues of the body and that the inflammatory response system of an individual mediates the clinical manifestation of the disease. The diagram below reflects some of the diseases that are thought to be significantly influenced by inflammation. It is now thought that SNP variations in the genes that influence the inflammatory process can have an important impact on a person's risk/trajectory of a disease.

Inflammation is the first organized response to any injurious challenge to the body, such as a bacterial infection. It is a well-defined process that involves the migration and activation of leukocytes from the blood to the site of challenge. The objective of inflammation is to localize and destroy the deleterious agent. If the deleterious agent cannot be cleared, the inflammation becomes chronic.

There are classic inflammatory diseases, such as rheumatoid arthritis, but in recent years inflammation has been found to underlie several other major diseases. For example, it is now known that chronic inflammation can be part of the process that leads to acute heart attacks. If an individual has a strong inflammatory response, he or she may be more successful in clearing a bacterial infection than an individual with a less robust response. However, an individual with a strong response may actually be at

increased risk for a more severe course in one or more of the chronic diseases of mid to later life, such as cardiovascular disease, osteoporosis, and Alzheimer's disease.

### **Core Technology**

Our intellectual property is highly focused on the discoveries that link genetic variations in key inflammation genes to risk for disease. Since the IL-1 and TNF $\alpha$  genes appear to be two of the strongest control points for the development and severity of inflammation, we have focused our efforts on them (mostly on the IL-1 gene family). We have patents issued on single SNPs and SNP patterns in the IL-1 gene cluster as they relate to use for identifying individuals on the rapid path to chronic disease complications. We believe these patents are controlling relative to IL-1 SNP patterns that would be used for genetic risk assessment tests. We also have issued claims and filed applications that focus on the use of IL-1 and TNF $\alpha$  SNPs to screen for nutritional compounds that block inflammatory mechanisms in individuals with certain genetic patterns.

Among the first genes activated with any injurious challenge are the genes for IL-1 and TNF $\alpha$ . Their proteins activate multiple biochemical cascades that lead to the cellular and molecular mechanisms that constitute inflammation. In the early 1990's, we developed innovative computer modeling approaches to explore how complex biological systems were regulated. This led to the issuance of several patents. Using computer models, and clinical and laboratory data, we determined that IL-1 and TNF $\alpha$  were at critical biological leverage points, and we initiated research programs to determine if variations in expression of IL-1 and TNF $\alpha$  were clinically important. Our work in this area was sufficiently early to allow us to secure a patent portfolio covering the use of variations in IL-1 genes for developing risk assessment tests and preventive (or ameliorative) non-pharmaceutical and pharmaceutical agents. Thus far, we have devoted most of our efforts to developing risk assessment tests.

In the early 1990's, as we were beginning to focus on the importance of IL-1, Dr. Gordon Duff in the United Kingdom identified the first SNPs in the IL-1 genes, and he and other investigators demonstrated that individuals with some of those variations produced higher levels of IL-1. In 1993, we initiated research collaborations with Dr. Duff, and in 1994, we initiated a joint venture agreement with him and Sheffield to investigate and patent the clinical use of variations in the genes that control inflammation. The research collaboration relationship lasted for ten years and helped us generate a number of patents. Dr. Duff continues to provide consulting services to us.

Groups of IL-1 SNPs are often inherited together as patterns called haplotypes. We have a U.S. patent issued on haplotypes in the IL-1 gene cluster and their biological and clinical significance.

Studies by us and others have now shown that individuals who have certain IL-1 gene variations or patterns of variations tend to have increased levels of IL-1 and also tend to have increased levels of other inflammatory mediators that are produced downstream of IL-1.

Individuals with a particular IL-1 genotype have significantly higher levels of IL-1 and other inflammatory mediators. Individuals with another specific genotype pattern tend to have lower levels of inflammatory mediators. It is also important to note that the IL-1 gene variations on which we are focused are highly prevalent in the population, with 8-10% of the Caucasian population being homozygous (having two copies) for the less frequent variant.

We have developed systems for screening drug and nutrient compounds for their differential effects on people with different genetic variations. Patent applications have been filed on this technology. These systems are also used for discovering biomarkers, i.e., biological chemicals that are indicative of a disease process.

Genetics of weight gain and loss

We have recently filed a patent application to expand our intellectual property to include gene variations, or genotypes, that regulate one important mechanism involved in fat metabolism. When an individual consumes more calories than he or she burns, the excess energy is stored in fat cells as lipid droplets. One of the key chemicals that regulates the mobilization of fat from the lipid droplet to be burned as energy is called perilipin. Investigators at Tufts University Medical School and Tufts Human Nutrition and Research Center have identified variations in the perilipin gene that appear to regulate fat metabolism and body weight. Studies have been completed on several thousand individuals showing that women with one specific perilipin genotype weigh an average of 22 pounds more than women with another perilipin genotype. The first paper on these findings was published in 2004 in *Clinical Genetics* by Qi, Corella, Greenberg, Ordovas, and co-workers entitled: Genetic variation at the perilipin (PLIN) locus is associated with obesity-related phenotypes in White women . We have licensed all rights to the use of this genetic test for weight management and for the use of this genetic information to develop nutritional products to facilitate weight management in individuals who have certain perilipin gene variations. We must perform a significant amount of research before we will know whether this can be the basis for a product of value to consumers.

Biomarker discovery and development systems

In addition to determining which gene variations assess which individuals may be more likely to develop earlier and more severe disease, we are attempting to discover if specific SNPs actually exert substantial influence on the advent of certain diseases. Such functional SNPs might help us find novel biomarkers for monitoring an individual's disease risk before the individual develops symptoms of disease or to monitor response to preventive or therapeutic or ameliorative agents to constrain the disease development. In addition, the functional SNPs provide targets for refining drug and nutrient benefits on specific groups of individuals.

**Business Strategy**

We are in the business of personalized health. We develop tests and plan to develop products that can help individuals improve and maintain their health through preventive measures. As highlighted in the diagram below, we plan to develop the following types of products:

- genetic risk assessment tests;
- preventive (or ameliorative) nutritional products for those individuals at risk; and
- personalized therapeutics (drug development based in part on genetic information).

We will use our intellectual property and expertise to develop products or acquire additional intellectual property that can be leveraged, through collaboration with partners, to address unmet market needs.



## Product Development Approach

As reflected in the diagram below, our current commercial strategy is to partner with companies with formulation and manufacturing capabilities and those that possess sales and marketing capabilities to distribute our products. We have no plans to develop our own sales force. The first of these strategic partnerships is the partnership we have with Alticor. The details of this partnership are described within the section titled "Strategic Alliances and Collaborations" on page 13.

## Critical Components to Our Commercialization Strategy

Our revenue model consists of: 1) charging a fee for processing a genetic risk assessment test; and 2) receiving a royalty from sales of products developed with a partner, or profit sharing from product sales. Our initial strategic alliance with Alticor does not include significant royalties on the sales of nutritional supplements. We plan to collaborate with other companies in research and development efforts. In these collaborations, we expect to receive research funding that covers our costs.

### **Products Available for Sale**

#### **Gensona Genetic Tests**

We have a research agreement with Alticor to develop certain genetic tests which Alticor will market to consumers through its channels under Alticor's Gensona brand. In 2006, we will provide two genetic risk assessment tests through Alticor. The Gensona Heart Health Genetic Test uses SNP testing of two genes to identify persons who may have an over-expression of inflammation and therefore may be at



increased risk for cardiovascular disease. The Gensona General Nutrition Genetic Test identifies SNPs of potential importance in two genes that affect vitamin B metabolism and four genes involved in responding to oxidative stress.

#### **PST®**

Periodontal disease (gum disease), similar to many other chronic inflammatory disorders, varies from one individual to another in severity and progression dependent upon the interaction of genetic and behavioral risk factors. The PST test offers a reliable way of assessing an individual's genetic risk for periodontal disease, the most common cause of tooth loss. There are other important environmental risks such as smoking.

#### **Products in Development**

Our current plan is to develop products in three categories:

1. **Genetic Risk Assessment Tests** these combine a genetic test with other disease-specific risk factors to generate a disease-specific personalized risk assessment. The information gathered from the genetic test and other sources is processed through a proprietary disease-specific algorithm to produce a personalized report. These products may be combined with a complementary product or service that provides a preventive or ameliorative solution to the problem. A strategic partner may provide these complementary products and services. We anticipate that revenue from these products will be in the form of a processing fee charged to the strategic partner.
2. **Preventive Nutritional Products** foods or nutritional products that are developed under a medical food regulatory pathway to assist in the management of a specific disease. These products will be sold through a strategic alliance with a distribution partner directly to physicians and medical professionals. Revenue from these products will either be a royalty on product sales or a profit sharing resulting from product sales. We are at the earliest stages of work in this area, and this effort will demand significant financial resources over many years before significant revenues can be realized.
3. **Personalized Therapeutics** compounds effective in the treatment of persons with a specific genetic variation that determines their response to the drug. These compounds may come from several sources, including, (i) off-patent drugs that can be re-patented as a treatment for a person who has a disease influenced by a specific genotype, (ii) drugs that were discontinued during development but shown to be safe in humans which might gain approval if we were able to identify the specific patients for whom they will work, (iii) drugs being developed, or recently launched for a specific indication that could also be developed for a different disease, and (iv) new chemical entities chosen because of recognized functions. Revenue from these products will consist of a processing fee for the test and royalties and milestone payments from product sales. We are at the earliest stages of work in therapeutics, a field which demands significant financial resources and requires many years before significant revenues can be realized.

As of December 31, 2005, the following products were in our development pipeline:

#### **Genetic Risk Assessment Tests**

##### *IL-1 Cardiovascular Genetic Test - International*

In the last decade, studies in men and women have shown that inflammation is an important risk factor for cardiovascular disease. Recent scientific discoveries indicate that some of the risk for cardiovascular disease, including heart attacks, is due to variations in the genes that we inherit. Just as with

conventional cardiovascular risk factors such as high cholesterol, smoking and diabetes, the presence of one or more of these DNA variations does not mean that an individual will develop cardiovascular disease. However, using knowledge about genetic risk factors to make informed choices about diet and lifestyle may reduce the risk of developing cardiovascular disease in the future.

Our health genetic test is the first and only genetic test that analyzes two interleukin 1 (IL-1) genes for variations that identify an individual's predisposition for over-expression of inflammation and which may cause an increased risk for cardiovascular disease. **This test is not intended to and does not diagnose an existing disease but rather is intended for healthy individuals to help assess their risk for future disease.** The IL-1 genetic test for heart health is based on data from genetic association studies obtained through collaborations with experts in cardiovascular disease at leading academic institutions. This genetic test provides risk information independent of traditional risk factors (such as family history, hypertension and smoking) in assessing risk for heart disease.

#### General Nutrition Genetic Test – International

To function properly, cells depend on the action of a vast number of genes. Our general nutrition genetic test analyzes variations in several genes that influence how the body uses vitamins and micronutrients. The test identifies individuals who may have altered B vitamin dependent metabolism or reduced response to oxidative stress.

This test uses SNPs that have been selected based on a comprehensive analysis of the scientific literature by our scientists. It analyzes two genes important to B vitamin utilization and four genes that are important in managing oxidative stress. This test can be used to identify individuals who may benefit from particular nutritional supplements, and who may be at increased likelihood for health complications. **This test is not intended to and does not diagnose a specific disease or assess a specific health condition.** It is intended to provide information to individuals who are interested in knowledge that may help them make choices about the consumption of certain vitamins and anti-oxidants.

- **B Vitamin Genes:** The genes analyzed related to B vitamin metabolism are 5-10-methylenetetrahydrofolate reductase gene (MTHFR) and the transcobalamin 2 gene (TCN2). The variant of the MTHFR gene that was tested has been associated with less efficient activity of certain enzymes that depend on B vitamins for optimal function. The variant of the TCN2 gene that was tested has been associated with affecting the body's need for vitamin B-12 and how effectively it reaches cells.
- **Oxidative Stress Genes:** The genes analyzed related to oxidative stress are manganese superoxide dismutase 2 (SOD2), glutathione s-transferase M1 (GSTM1), paroxanase 1 (PON1), and x-ray repair cross complementing gene (XRCC1). Some studies have found that variations in these genes have been associated with increased risk for certain diseases, such as cardiovascular disease and certain cancers. More research needs to be done to confirm these associations. Knowing genetic variations associated with nutrient and vitamin metabolism may help guide decisions about use of vitamins and anti-oxidants.

#### Osteoporosis Genetic Test – North America and International

Osteoporosis, the most common age-related bone disease, results in a decrease in the strength of the bone that leaves the affected individual more susceptible to fractures. According to the National Institute of Health, 10 million Americans suffer from the disease and another 34 million have low bone mass, placing them at increased risk for the disease. Although osteoporosis occurs in both men and women, it begins earlier and progresses more rapidly in women after menopause. The consequences of osteoporosis can be both physical and financial. Hip and vertebral fractures, which are commonly associated with osteoporosis, have a profound impact on quality of life. We have conducted research projects with major

osteoporosis centers. Results of these studies have indicated that a number of small variations in the IL-1 gene cluster, referred to as polymorphisms, are associated with a more rapid rate of bone loss and an increased risk of vertebral fracture in post-menopausal Caucasian women. A genetic risk assessment test could identify women at elevated risk for developing osteoporosis-related vertebral fracture comparatively early in the course of the disease and allow these women and their physicians to pursue risk reduction practices. This would enable nutritional or therapeutic intervention or recommendations for changes in lifestyle or diet at an early stage, so that bone loss and fractures are minimized or prevented.

This test we plan to develop will combine the IL-1 SNPs with other SNPs in other genes known to be associated with bone loss to form a test panel. Efforts to develop the osteoporosis risk assessment test are driven in part by our research agreement with Alticor.

*Weight Management Genetic Test*

According to the 1999-2003 National Health and Nutrition Examination Survey, an estimated 65% of adults in the U.S. are overweight (Body Mass Index > 25). Overweight and obese individuals are at increased risk for many diseases including heart disease, type II diabetes, and some types of cancer. Our objective is to develop a test that offers information about how specific individuals gain and maintain weight. This product is in a very early phase of development.

**Preventive Nutritional Product**

*Periodontal Disease (PerioNx)*

This product is in an early research phase of development. It consists of nutritional ingredients that will be formulated to be efficacious as part of the therapy and management of periodontal disease. If we are successful in the early phases of product development, we expect this product to be co-developed with a marketing partner with a presence in the dental market and with a manufacturing partner. The product is designed for persons who currently have severe periodontal disease or who have mild disease plus one of the risk factors for severe disease (smoking, diabetes, or being positive for the PST test).

*Product Pipeline Summary*

The table below summarizes the key milestones completed of the products described above.

We are launching our cardiovascular health and general nutrition tests in the first quarter of 2006 in North America through the Alticor business channel. We currently cannot predict the adoption rate of this test in the particular channel in which it is being launched.

We have spent \$3.1 million, \$4.1 million and \$3.5 million on research and development during the years ended December 31, 2005, 2004 and 2003, respectively. We expect to spend between \$3.0 million and \$3.5 million in 2006. These research and development expenses include research funded by Alticor.

**Laboratory Testing Procedure**

To conduct a genetic risk assessment test, the consumer collects cells from inside the cheek on a brush and submits it by mail to our laboratory. Our clinical laboratory then performs the test following our specific protocol and informs the consumer and, depending on the regulations in the particular state or (in Canada) province, his designated health care provider, of the results.

During 2004, we completed the construction of our genetic testing laboratory (for which we obtained registration under the Clinical Laboratory Improvement Act of 1988 (CLIA) in 2005) to process the test samples. The regulatory requirements associated with a clinical laboratory are addressed under the section titled Government Regulation on page 16.

**Marketing and Distribution Strategy**

We will market and distribute our products through strategic partnerships. The type of sales and marketing partner will differ based on the type of products.

*Genetic Risk Assessment Tests*

Our marketing partner for these products will likely be a consumer product company with nutritional products developed to mitigate a risk assessed by our tests. The nutritional products are likely to be personalized (matched to the results of a genetic test).

*Preventive Nutritional Products*

Our sales and marketing partner for these products will most likely either be a consumer or a pharmaceutical product company with a sales force that calls on medical/dental professionals. Access to the product by patients may or may not require a prescription. The ideal partner is likely to have national or worldwide distribution capabilities. We are at an early stage of work in this area.

*Personalized Therapeutic Products*

Our sales and marketing partner for these products will likely be a pharmaceutical company that is a late entry in a particular disease market and is seeking a product with a differentiating feature. The ideal partner is likely to be progressive in genomics technology and have appreciation for the value of personalized medicine. We are at the very earliest stages of work in this area.

**Reimbursement**

Under our distribution agreement with Alticor, Alticor pays us directly for the processed tests and, therefore, we do not anticipate facing issues in third-party reimbursement in the near future. We have some products under development that may require third-party reimbursement. To the extent that some of our products are sold through the medical channel, our ability to successfully commercialize these products may depend on obtaining adequate reimbursement from third-party payers.

**Strategic Alliances and Collaborations**

Our strategy is to develop products for research and clinical use and commercialize such products through strategic alliances. We have followed a strategy of working with strategic partners at the fundamental discovery stage in product development and in sales and marketing. This strategy has given us access to discoveries while reducing up-front research expenses and will give us access to markets without committing to the high costs of selling and advertising.

*Alticor*

In March 2003, we entered into a broad strategic alliance with Alticor to develop and market novel nutritional and skin care products. (To date, we have done little work in regard to skin care). The alliance utilizes our intellectual property and expertise in genetics to develop risk assessment tests and to aid Alticor in its effort to develop personalized consumer products. The alliance has included an equity investment, multi-year research and development agreements, a licensing agreement with minimal royalties on marketed products, the deferment of outstanding loan repayment and the refinancing of bridge financing obligations. The financial elements of this alliance are described in greater detail in the section titled *Liquidity and Capital Resources* .

We expect that this alliance will open our research and development products to our partner's proven marketing and distribution channels (including in Asia). Alticor and we share a belief that the future of personalized nutritional supplementation and skin care will be based on an individual's genetic makeup. This alliance is currently focused on developing genetic risk assessment tests to determine a genetic profile of an individual and developing nutritional supplements and skin care products that will benefit individuals of that genetic profile.

### **Academic Research Collaborations**

We have (or have had) active research collaborations at the following academic institutions:

#### *University of Sheffield*

We have followed a strategy of working with partners at the fundamental discovery stage. This strategy has given us access to discoveries while reducing up-front research expenses. For example, from 1994-2004 we had an alliance with Sheffield. Under this alliance, Sheffield conducted fundamental discovery and genetic analysis, and we focused on product development, including clinical trials, and the commercialization of these discoveries. The agreements with Sheffield and certain of its investigators expired in June 2004. We continue to have an agreement with one Sheffield investigator (Dr. Gordon Duff).

#### *Tufts University*

We have licensed genetic technology from Tufts University related to the control of fat metabolism, body weight, and metabolic syndrome. We have active research agreements with Tufts that are focused on the genetics of body weight and on the development of products that alter fat metabolism and body weight. These studies are under the direction of Drs. Jose Ordovas and Andrew Greenberg at Tufts.

#### *Mayo Clinic*

We previously funded and conducted a clinical study of genetics and cardiovascular disease at the Mayo Clinic. Although the clinical phase of this project is complete, further research on the clinical data and on the patients' DNA continues in collaboration with Dr. Peter Berger who was the principal investigator at Mayo but is now Head of Interventional Cardiology at Duke University.

#### *California Pacific Medical Center (CPMC)*

We have studies with CPMC in late stages that are focused on the genetics of osteoporosis and the genetics of cardiovascular disease. These studies are under the direction of Drs. Stephen Cummings and Katherine Stone.

#### *Boston University*

We have funded research at Boston University Medical Center to determine the influence of IL-1 gene variations on biochemical factors involved in various inflammatory diseases that are the targets for drug development by multiple companies. We hope to use this information to develop pharmacogenetic tests.

#### *University of Arkansas*

In March 2002, we entered into a collaboration with the University of Arkansas for Medical Sciences College of Medicine to study how genetic variations in inflammatory genes influenced risk for Alzheimer's Disease and to identify potential drug targets for that disorder. The collaboration is small. In addition, we have recently completed studies at the University of Arkansas on the influence of genetic variations on muscle function with aging and in response to exercise.

#### *Yonsei University*

We entered into a collaboration with Yonsei University in Seoul, Korea to study the cytokine gene variations in certain Asian individuals as it relates to cardiovascular disease. Under the direction of



Yangsoo Yang and Jong Ho Lee, Yonsei University is performing a clinical study in Korea to determine the haplotypes of these individuals.

### **PST® Commercial Partnerships**

#### *Hain Diagnostika/ADS GmbH and Laboral International*

In December 2000, we entered into an exclusive seven-year license agreement with Hain Diagnostika/ADS GmbH (Hain) for the marketing, distribution and processing of PST® in all countries outside of North America and Japan. In May 2003, we amended the agreement with Hain to a non-exclusive license limited to the European Territory. Since then we added Laboral International as a non-exclusive PST® distributor in Europe. Revenue from Hain and Laboral International was minimal in 2005 and 2004.

#### *Kimball Genetics, Inc.*

In September 2000, we entered into a 5-year agreement with Kimball Genetics, Inc. to process PST® tests and market the product in the United States on a non-exclusive basis. Since December 2001, Kimball has been our sole marketing partner within the United States. We receive a royalty from Kimball for every PST® test processed. Revenue from Kimball was minimal in 2005 and 2004. We are currently operating under the terms of the expired agreement.

### **Intellectual Property**

Our commercial success may depend at least in part on our ability to obtain appropriate patent protection on our drug discovery and diagnostic products and methods. We currently own rights in twenty issued U.S. patents, which have expiration dates between 2015 and 2020, and have twenty additional U.S. patent applications pending, which are based on novel genes or novel associations between particular gene sequences and certain inflammatory diseases, and disorders. Of the twenty issued patents, sixteen relate to genetic tests for periodontal disease, osteoporosis, asthma, coronary artery disease, sepsis and disease associated with IL-1 inflammatory haplotypes, three relate to BioFusion, our biologic modeling software, and one relates to a transgenic mouse model.

We have been granted a number of corresponding foreign patents and have a number of foreign counterparts of our U.S. patents and patent applications pending.

We have received trademark protection for PST®, our periodontal genetic risk assessment test. Our proprietary technology is subject to numerous risks, which we discuss in *Risk Factors* beginning on page 17 of this report.

### **Competition**

The competition in the field of personalized health is not well defined due to lack of an established market and customer base. There are a few companies offering predisposition tests and product recommendations but we believe they neither have the intellectual property nor the scientific credibility required to provide market leadership. There are a number of companies involved in identifying and commercializing genetic markers. The companies differ in product end points and target customers. The companies in the industry break down into four sectors, including, 1) predictive medicine companies, 2) SNP discovery companies, 3) personalized health companies, and 4) technology platform companies.

Our potential competitors in the United States and abroad are numerous and include, among others, major pharmaceutical and diagnostic companies, specialized biotechnology firms, universities and other research institutions. Many of our potential competitors have considerably greater financial, technical, marketing and other resources than we have, which may allow these competitors to discover important

genes or successfully commercialize these discoveries before us. If we do not discover disease-predisposing genes, characterize their functions, develop genetic tests and related information services based on such discoveries, obtain regulatory and other approvals, and launch these services or products before competitors, we could be adversely affected. Additionally, some of our competitors receive data and funding from government agencies. To the extent our competitors receive data and funding from those agencies at no cost to them, they may have a competitive advantage over us.

In the case of newly introduced products requiring change of behavior (such as genetic risk assessment tests), multiple competitors may accelerate market acceptance and penetration through increasing awareness. Moreover, two different genetic risk assessment tests for the same disease may in fact test or measure different components, and thus, actually be complementary when given in parallel as an overall assessment of risk, rather than being competitive with each other.

Furthermore, the primary focus of most companies in the field is performing gene-identification research for pharmaceutical companies for therapeutic purposes, with genetic risk assessment testing being a secondary goal. In contrast, our primary business focus is developing and commercializing genetic risk assessment tests for common diseases and forward-integrating these tests with additional products and services.

### **Government Regulation**

The cheek cell samples, which are submitted by individuals, are collected using standard materials previously approved as medical devices. The testing procedure itself is performed in a CLIA clinical laboratory. It is possible that a changing regulatory climate could someday require advance regulatory approval of the launch of genetic risk assessment tests, which could have a material adverse effect on our business.

Some states forbid laboratories from accepting samples from consumers without a requisition order signed by a physician or other health care practitioner. Any state (or, in Canada, province), at any time could adopt new laws or regulations or change its interpretation of existing rules in a manner that constrains or forbids us to accept samples from consumers in that state without the intercession of a health care practitioner. We are endeavoring to comply with the relevant rules in each jurisdiction. The regulatory issues are difficult to anticipate.

### **Other Information**

Our executive offices are located at 135 Beaver Street, Waltham, Massachusetts 02452, and our telephone number is 781/398-0700. We were incorporated in Texas in 1986 and we re-incorporated in Delaware in March 2000. We maintain a website at [www.ilgenetics.com](http://www.ilgenetics.com). Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to such reports are available to you free of charge through the Investor Relations Section of our website as soon as practicable after such materials have been electronically filed with, or furnished to, the Securities and Exchange Commission. The information contained on our website is not incorporated by reference into this Form 10-K. We have included our website address only as an inactive textual reference and do not intend it to be an active link to our website.

### **Employees**

As of February 28, 2006, we had 22 full-time and part-time employees. Of our employees, 15 were engaged primarily in the research, development and commercialization of tests and 7 were engaged primarily in administrative or managerial activities. Our employees are not covered by a collective bargaining agreement, and we consider our relations with our employees to be good.

**Item 1A.**        *Risk Factors*

*We have a history of operating losses and expect these losses to continue in the future.*

We have experienced significant operating losses since our inception and expect these losses to continue for some time. We incurred losses from operations of \$5.9 million in 2003, \$6.7 million in 2004 and \$6.1 million in 2005. As of December 31, 2005, our accumulated deficit was \$61.2 million. Our losses result primarily from research and development, general and administrative expenses. We have not generated, and we may never generate sufficient revenue from product sales to cover our operating expenses. We will need to generate significant revenue to continue our research and development programs and achieve profitability. We cannot predict when, if ever, we will achieve profitability.

*The market for genetic risk assessment tests is unproven.*

The market for genetic risk assessment tests is at an early stage of development and may not continue to grow. The general scientific community, including us, has only a limited understanding of the role of genes in predicting disease. When we identify a gene or genetic marker that may influence risk for disease, we conduct clinical trials to confirm the initial scientific discovery and to establish the scientific discovery's clinical utility in the marketplace. The results of these clinical trials could limit or delay our ability to bring the test to market, reduce the test's acceptance by our customers or cause us to cancel the program, any of which would limit or delay sales and cause additional losses. The marketplace may never accept our products, and we may never be able to sell our products at a profit. We may not complete development of or commercialize our other genetic risk assessment tests.

The success of our genetic risk assessment tests will depend upon their acceptance as medically useful and cost-effective by patients, physicians, dentists, other members of the medical and dental community and by third-party payers, such as insurance companies and the government. We can achieve broad market acceptance only with substantial education about the benefits and limitations of genetic risk assessment tests.

*The market for personalized health is unproven.*

The competition in the field of personalized health is not well defined due to a lack of an established market and customer base. The concept is new and requires consumers to do things differently, hence may be considered a disruptive technology. Adoption of such technology requires substantial market development. Activities in these areas remain small and the overall market is unproven. There can be no assurance that these products will be successful upon launch or that they can be sold at sufficient volume to make them profitable. If customers do not accept our tests, or take a longer time to accept them than we anticipate, then it will reduce our anticipated sales, resulting in additional losses.

*We rely heavily on third parties to perform sales, marketing and distribution functions on our behalf, which could limit our efforts to successfully market products.*

We have limited experience and capabilities with respect to distributing, marketing and selling genetic risk assessment tests. We have relied and plan to continue to rely significantly on sales, marketing and distribution arrangements with third parties, over which we have limited influence. If these third parties do not successfully market our products, it will reduce our anticipated sales and increase our losses. If we are unable to negotiate acceptable marketing and distribution agreements with future third parties, or if in the future we elect to perform sales, marketing and distribution functions ourselves, we will incur significant costs and face a number of additional risks, including the need to recruit experienced marketing and sales personnel. While Alticor has far more experience and success in marketing, selling and distributing products than we do, we are dependent upon their success, and their failure to successfully market our products could reduce our anticipated sales and increase our losses.

*If we fail to obtain additional capital, or obtain it on unfavorable terms, then we may have to end our research and development programs and other operations.*

We expect that our current and anticipated financial resources are adequate to maintain our current and planned operations through mid-2007. If we are not generating sufficient cash or cannot raise additional capital prior to that date, we will be unable to fund our business operations and will be required to seek other strategic alternatives.

Our future capital needs depend on many factors. We will need capital for the commercial launch of additional genetic tests, continued research and development efforts, obtaining and protecting patents and administrative expenses. Additional financing may not be available when needed, or, if available, it may not be available on favorable terms. If we cannot obtain additional funding on acceptable terms when needed, we may have to discontinue operations, or, at a minimum, curtail one or more of our research and development programs.

*Because a single shareholder has a controlling percentage of our voting power, other stockholders' voting power is limited.*

As of December 31, 2005, a single stockholder owned, or had rights to own approximately 57.4% of our outstanding common stock. Accordingly, this stockholder may be able to determine the outcome of stockholder votes, including votes concerning the election of directors, the adoption or amendment of provisions in our Certificate of Incorporation or By-Laws and the approval of certain mergers and other significant corporate transactions, including a sale of substantially all of our assets. This stockholder may make decisions that are adverse to other stockholders' or warrant holders' interests. This ownership concentration may also adversely affect the market price of our common stock. Three of our four directors are individuals chosen by this single stockholder and that stockholder has the right to choose an additional director. These directors might pursue policies in the interest of this single stockholder to the detriment of our other stockholders.

*The Series A Preferred Stock has certain rights which are senior to common shareholder rights and this may reduce the value of the common stock.*

The Series A Preferred Stock, which was issued to Alticor in March 2003, accrues dividends at the rate of 8% of the original purchase price per year, payable only when, as and if declared by the Board of Directors and are non-cumulative. If we declare a distribution, with certain exceptions, payable in securities of other persons, evidences of indebtedness issued by us or other persons, assets (excluding cash dividends) or options or rights to purchase any such securities or evidences of indebtedness, then, in each such case the holders of the Series A Preferred Stock shall be entitled to a proportionate share of any such distribution as though the holders of the Series A Preferred Stock were the holders of the number of shares of our common stock into which their respective shares of Series A Preferred Stock are convertible as of the record date fixed for the determination of the holders of our common stock entitled to receive such distribution.

In the event of any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of our assets or surplus funds to the holders of our common stock by reason of their ownership thereof, the amount of two times the then-effective purchase price per share, as adjusted for any stock dividends, combinations or splits with respect to such shares, plus all declared but unpaid dividends on such share for each share of Series A Preferred Stock then held by them. After receiving this amount, the holders of the Series A Preferred Stock shall participate on an as-converted basis with the holders of common stock in any of our remaining assets.

The preferential treatment accorded the Series A Preferred Stock might reduce the value of the common stock.

*If we are unsuccessful in establishing additional strategic alliances, our ability to develop and market products and services may be damaged.*

Entering into strategic alliances for the development and commercialization of products and services based on our discoveries is an important element of our business strategy. We anticipate entering into additional collaborative arrangements with Alticor and other parties in the future. We face significant competition in seeking appropriate collaborators. In addition, these alliance arrangements are complex to negotiate and time-consuming to document. If we fail to maintain existing alliances or establish additional strategic alliances or other alternative arrangements, then our ability to develop and market products and services may be damaged. In addition, the terms of any future strategic alliances may be unfavorable to us or these strategic alliances may be unsuccessful.

*If we fail to obtain an adequate level of reimbursement for our products or services by third-party payers, then our products and services may not be commercially viable.*

The availability and levels of reimbursement by governmental and other third-party payers affects the market for any healthcare service. These third-party payers continually attempt to contain or reduce the costs of healthcare by challenging the prices charged for medical products and services. Should we enter the medical channel, our ability to successfully commercialize our existing genetic risk assessment test and others that we may develop depends on obtaining adequate reimbursement from third-party payers. The extent of third-party payer reimbursement may likely heavily influence physicians and dentists decisions to recommend genetic risk assessment tests, as well as patients elections to pursue testing. If reimbursement is unavailable or limited in scope or amount, then we may not be able sell our products and services at a profit. In particular, third-party payers tend to deny reimbursement for services which they determine to be investigational in nature or which are not considered reasonable and necessary for diagnosis or treatment. To date, few third-party payers have agreed to reimburse patients for genetic risk assessment tests, and we do not know if third-party payers will, in the future, provide full reimbursement coverage for these genetic tests. If third-party payers do not provide adequate reimbursement coverage, then individuals may choose to directly pay for the test. If both third-party payers and individuals are unwilling to pay for the tests, then the number of tests we can sell may be significantly decreased, resulting in reduced anticipated sales and additional losses.

*If we fail to obtain patent protection for our products and preserve our trade secrets, then competitors may develop competing products and services, which will likely decrease our sales and market share.*

Our success will partly depend on our ability to obtain patent protection, in the United States and in other countries, for our products and services. In addition, our success will also depend upon our ability to preserve our trade secrets and to operate without infringing upon the proprietary rights of third parties.

We own rights in twenty issued U.S. patents and have a number of additional U.S. patent applications pending. We have also been granted a number of corresponding foreign patents and have a number of foreign counterparts of our U.S patents and patent applications pending. Our patent positions, and those of other pharmaceutical and biotechnology companies, are generally uncertain and involve complex legal, scientific and factual questions. Our ability to develop and commercialize products and services depends on our ability to:

- Obtain patents;
- Obtain licenses to the proprietary rights of others;

- Prevent others from infringing on our proprietary rights; and
- Protect trade secrets.

Our pending patent applications may not result in issued patents and any issued patents may never afford meaningful protection for our technology or products. Further, others may develop competing products, which avoid legally infringing upon, or conflicting with, our patents. In addition, competitors may challenge any patents issued to us, and these patents may subsequently be narrowed, invalidated or circumvented.

We also rely on trade secrets and proprietary know-how that we seek to protect, in part, by confidentiality agreements. The third parties we contract with may breach these agreements, and we might not have adequate remedies for any breach. Additionally, our competitors may discover or independently develop our trade secrets.

*Third parties may own or control patents or patent applications and require us to seek licenses, which could increase our costs or prevent us from developing or marketing our products or services.*

We may not have rights under patents or patent applications that are related to our current or proposed products. Third parties may own or control these patents and patent applications in the United States and abroad. Therefore, in some cases, to develop or sell any proposed products or services, with patent rights controlled by third parties, our collaborators or we may seek, or may be required to seek, licenses under third-party patents and patent applications. If this occurs, we may have to pay license fees or royalties or both to the licensor. If licenses are not available to us on acceptable terms, our collaborators or we may be prohibited from developing or selling our products or services.

If third parties believe our products or services infringe upon their patents, they could bring legal proceedings against us seeking damages or seeking to enjoin us from testing, manufacturing or marketing our products or services. Any litigation could result in substantial expenses to us and significant diversion of attention by our technical and management personnel. Even if we prevail, the time, cost and diversion of resources of patent litigation would likely damage our business. If the other parties in any patent litigation brought against us are successful, in addition to any liability for damages, we may have to cease the infringing activity or obtain a license.

*Technological changes may cause our products and services to become obsolete.*

Our competitors may develop risk assessment tests that are more effective than our technologies or that make our technologies obsolete. Innovations in the treatment of the diseases in which we have products or product candidates could make our products obsolete. These innovations could prevent us from selling, and significantly reduce or eliminate the markets for, our products.

*We may be prohibited from fully using our net operating loss carryforwards, which could affect our financial performance.*

As a result of the losses incurred since inception, we have not recorded a federal income tax provision and have recorded a valuation allowance against all future tax benefits. As of December 31, 2005, we had gross net operating loss and research tax credit carryforwards of approximately \$43.0 million and \$870,000, respectively, for federal income tax purposes, expiring in varying amounts through the year 2025. As of December 31, 2005, we had gross net operating loss and research tax credit carryforwards of approximately \$20.0 million and \$330,000, respectively, for state income tax purposes, expiring in varying amounts through the year 2010. Our ability to use these net operating loss and credit carryforwards is subject to restrictions contained in the Internal Revenue Code which provide for limitations on our utilization of our net operating loss and credit carryforwards following a greater than 50% ownership change during the

prescribed testing period. We have experienced two such ownership changes. One change arose in March 2003 and the other was in June 1999. As a result, all of our net operating loss carryforwards are limited in utilization. The annual limitation may result in the expiration of the carryforwards prior to utilization. In addition, in order to realize the future tax benefits of our net operating loss and tax credit carryforwards, we must generate taxable income, of which there is no assurance.

*We could become subject to intense competition from other companies, which may damage our business.*

Our industry is highly competitive. Our potential competitors in the United States and abroad are numerous and include major pharmaceutical and diagnostic companies, specialized biotechnology firms, universities and other research institutions. Many of our competitors have considerably greater financial resources, research and development staffs, facilities, technical personnel, marketing and other resources than we do. Furthermore, many of these competitors are more experienced than we are in discovering, commercializing and marketing products. These greater resources may allow our competitors to discover important genes or genetic markers before we do. If we do not discover gene variants that influence disease risk and commercialize these discoveries before our competitors, then our ability to generate sales and revenue will be reduced or eliminated, and could make our products obsolete. We expect competition to intensify in our industry as technical advances are made and become more widely known.

*We are subject to government regulation which may significantly increase our costs and delay introduction of future products.*

Changes in existing regulations at either the state or federal level could require advance regulatory approval of genetic risk assessment tests, resulting in a substantial curtailment or even prohibition of our activities without regulatory approval. If our genetic tests ever require regulatory approval, on either a state or federal level, then the costs of introduction may increase and marketing and sales of products may be significantly delayed. We anticipate that the testing procedure itself will be performed primarily in our own genetic testing laboratory, which currently is registered and will need to be certified under the auspices of the Clinical Laboratory Improvement Act of 1988 (CLIA), administered by the Health Care Financing Administration. We anticipate there will also be additional state and local regulations governing the operation of this laboratory. An inability to obtain or maintain our CLIA certification or any applicable state or local certification would reduce our revenue and increase our net losses. Although it has not done so, the FDA could assert pre-market review of genetic tests.

*We may be subject to product liability claims that are costly to defend and that could limit our ability to use some technologies in the future.*

The design, development, manufacture and use of our genetic risk assessment tests involve an inherent risk of product liability claims and associated adverse publicity. Producers of medical products face substantial liability for damages in the event of product failure or allegations that the product caused harm. We currently maintain product liability insurance, but it is expensive and difficult to obtain, may not be available in the future on economically acceptable terms and may not be adequate to fully protect us against all claims. We may become subject to product liability claims that, even if they are without merit, could result in significant legal defense costs. We could be held liable for damages in excess of the limits of our insurance coverage, and any claim or resulting product recall could create significant adverse publicity.

*Ethical, legal and social issues related to genetic testing may reduce demand for our products.*

Genetic testing has raised issues regarding the appropriate utilization and the confidentiality of information provided by genetic testing. Genetic tests for assessing a person's likelihood of developing a chronic disease have focused public attention on the need to protect the privacy of genetic information. For example, concerns have been expressed that insurance carriers and employers may use these tests to

discriminate on the basis of genetic information, resulting in barriers to the acceptance of genetic tests by consumers. This could lead to governmental authorities prohibiting genetic testing or calling for limits on or regulating the use of genetic testing, particularly for diseases for which there is no known cure. Any of these scenarios would decrease demand for our products and result in substantial losses.

*Our dependence on key executives and scientists could adversely impact the development and management of our business.*

Our success substantially depends on the ability, experience and performance of our senior management and other key personnel. If we lose one or more of the members of our senior management or other key employees, it could damage our development programs and our business. In addition, our success depends on our ability to continue to hire, train, retain and motivate skilled managerial and scientific personnel. The pool of personnel with the skill that we require is limited. Competition to hire from this limited pool is intense. We compete with numerous pharmaceutical and healthcare companies, as well as universities and nonprofit research organizations in the highly competitive Boston, Massachusetts business area. Loss of the services of Dr. Philip R. Reilly, our Chief Executive Officer, Dr. Kenneth Kornman, our President and Chief Scientific Officer, or Dr. Ramon Mohanlal, our Chief Medical Officer, could delay our research and development programs or otherwise damage our business. In March 2003, we entered into employment agreements with three-year terms with Dr. Reilly and Dr. Kornman. Each of these employees can terminate his employment upon 30 days notice. We do not maintain key man life insurance on any of our personnel.

*In a circumstance in which Alticor enters a business in competition with our own, our Directors might have a conflict of interest.*

In conjunction with our strategic alliance with Alticor, we have agreed to certain terms for allocating opportunities as permitted under Section 122(17) of the Delaware General Corporation Law. This agreement, as set forth in the Purchase Agreement, regulates and defines the conduct of certain of our affairs as they may involve Alticor as our majority stockholder and its affiliates, and the powers, rights, duties and liabilities of us and our officers and directors in connection with corporate opportunities.

Except under certain circumstances, Alticor and its affiliates have the right to engage in the same or similar activities or lines of business or have an interest in the same classes or categories of corporate opportunities as we do. If Alticor or one of our directors appointed by Alticor, and its affiliates acquire knowledge of a potential transaction or matter that may be a corporate opportunity for both Alticor and its affiliates and us, to the fullest extent permitted by law, Alticor and its affiliates will not have a duty to inform us about the corporate opportunity or be liable to us or to you for breach of any fiduciary duty as a stockholder of ours for not informing us of the corporate opportunity, keeping it for its own account, or referring it to another person.

Additionally, except under limited circumstances, if an officer or employee of Alticor who is also one of our directors is offered a corporate opportunity, such opportunity shall not belong to us. In addition, we agreed that such director will have satisfied his duties to us and not be liable to us or to you in connection with such opportunity.

The terms of this agreement will terminate on the date that no person who is a director, officer or employee of ours is also a director, officer, or employee of Alticor or an affiliate.

*We do not expect to pay dividends for the foreseeable future and you should not expect to receive any funds without selling your shares of common stock, which you may only be able to do at a loss.*

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any earnings for use in the operation and expansion of our business and do not anticipate paying any cash



dividends on our common stock in the foreseeable future. Therefore, you should not expect to receive any funds without selling your shares, which you may only be able to do at a loss.

**Item 1B.**        *Unresolved Staff Comments*

None.

**Item 2.**        *Properties*

Our offices and laboratories are located at 135 Beaver Street, Waltham, Massachusetts 02452. In February 2004, we entered into a new lease expanding our space to approximately 19,000 square feet and extended the term of the lease through March 2009.

**Item 3.**        *Legal Proceedings*

We are not currently a party to any material legal proceedings and management is not aware of any contemplated proceedings by any governmental authority against us.

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

No matters were submitted to a vote of security holders during the fourth quarter of the year ended December 31, 2005.

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**PART II****Item 5.** *Market for Registrant's Common Equity and Related Stockholder Matters***Market Information**

Our common stock began trading on The Nasdaq SmallCap Market on November 26, 1997 under the symbol **MSSI** and on the Boston Stock Exchange under the symbol **MSI**. In August 1999, our common stock symbol changed to **ILGN** on the Nasdaq SmallCap Market and **ILG** on the Boston Stock Exchange. On December 10, 2002, our common stock was delisted from the Nasdaq SmallCap Market and began trading on the OTC Bulletin Board under the symbol **ILGN.OB**. On December 28, 2005, our common stock began trading on the American Stock Exchange (AMEX) under the symbol **ILI**. The common stock currently trades on the American Stock Exchange and the Boston Stock Exchange. Prior to November 1997, there was no established trading market for the common stock. The following table sets forth, for the periods indicated, the high and low sales prices for the common stock, as reported by the OTC Bulletin Board through December 27, 2005 and the AMEX thereafter.

|                | <b>High</b> | <b>Low</b> |
|----------------|-------------|------------|
| <b>2005:</b>   |             |            |
| First Quarter  | \$ 4.00     | \$ 3.20    |
| Second Quarter | \$ 3.92     | \$ 2.95    |
| Third Quarter  | \$ 4.50     | \$ 2.95    |
| Fourth Quarter | \$ 6.42     | \$ 3.30    |

|                | <b>High</b> | <b>Low</b> |
|----------------|-------------|------------|
| <b>2004:</b>   |             |            |
| First Quarter  | \$ 5.00     | \$ 3.75    |
| Second Quarter | \$ 5.01     | \$ 4.05    |
| Third Quarter  | \$ 4.93     | \$ 2.76    |
| Fourth Quarter | \$ 4.59     | \$ 2.70    |

**Stockholders**

As of February 28, 2006, there were approximately 127 stockholders of record and according to our estimates, approximately 2,200 beneficial owners of our common stock.

**Dividends**

We have not declared any dividends to date and do not plan to declare any dividends on our common stock in the foreseeable future.

**Sale of Unregistered Securities**

None.

**Issuer Purchases of Equity Securities**

None.

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**Item 6.** *Selected Financial Data*

The following table sets forth our financial data as of and for each of the five years ended December 31, 2005. The selected financial data as of and for each of the five years ended December 31, 2005 has been derived from our financial statements. Our financial statements and the related reports as of December 31, 2005 and 2004 and for the years ended December 31, 2005, 2004 and 2003 are included elsewhere in this Annual Report on Form 10-K. The information below should be read in conjunction with the financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7.

|   | <b>Year Ended December 31,</b> |                 |                  |                 |                 |
|---|--------------------------------|-----------------|------------------|-----------------|-----------------|
|   | <b>2005</b>                    | <b>2004</b>     | <b>2003</b>      | <b>2002</b>     | <b>2001</b>     |
| <b>Statement of Operations Data:</b>              |                                |                 |                  |                 |                 |
| Revenue   | \$ 22,877                      | \$ 34,671       | \$ 54,105        | \$ 289,908      | \$ 202,942      |
| Cost of revenue                                   |                                | 351             | 20,658           | 484             | 48,674          |
| Gross profit                                      | 22,877                         | 34,320          | 33,447           | 289,424         | 154,268         |
| <b>Operating Expenses:</b>                        |                                |                 |                  |                 |                 |
| Research and development                          | 3,127,086                      | 4,078,316       | 3,457,861        | 3,082,484       | 2,686,621       |
| Selling, general and administrative               | 2,953,779                      | 2,658,037       | 2,443,219        | 2,333,314       | 2,244,274       |
| Total operating expenses                          | 6,080,865                      | 6,736,353       | 5,901,080        | 5,415,798       | 4,930,895       |
| Loss from operations                              | (6,057,988 )                   | (6,702,033 )    | (5,867,633 )     | (5,126,374 )    | (4,776,627 )    |
| <b>Other income (expense):</b>                    |                                |                 |                  |                 |                 |
| Interest income                                   | 131,656                        | 58,115          | 48,535           | 26,784          | 263,435         |
| Interest expense                                  | (182,617 )                     | (140,410 )      | (144,802 )       | (71,894 )       | (9,818 )        |
| Amortization of note discount                     | (461,875 )                     | (461,874 )      | (595,014 )       | (150,082 )      |                 |
| Other income (expense), net                       |                                |                 |                  | 15,447          | 304             |
| Net loss  | \$ (6,570,824 )                | \$ (7,246,202 ) | \$ (6,558,914 )  | \$ (5,306,119 ) | \$ (4,522,706 ) |
| Accretion of convertible preferred stock discount |                                |                 | (8,094,727 )     |                 |                 |
| Net loss attributable to common stockholders      | \$ (6,570,824 )                | \$ (7,246,202 ) | \$ (14,653,641 ) | \$ (5,306,119 ) | \$ (4,522,706 ) |
| Net loss per basic and diluted common share       | \$ (0.28 )                     | \$ (0.31 )      | \$ (0.63 )       | \$ (0.24 )      | \$ (0.21 )      |
| Weighted average common shares outstanding        | 23,702,967                     | 23,482,642      | 23,193,195       | 21,713,432      | 21,049,437      |

|  | <b>As of December 31,</b> |              |              |                 |              |
|--|---------------------------|--------------|--------------|-----------------|--------------|
|  | <b>2005</b>               | <b>2004</b>  | <b>2003</b>  | <b>2002</b>     | <b>2001</b>  |
| <b>Selected Balance Sheet Data:</b>                                |                           |              |              |                 |              |
| Cash, cash equivalents and marketable securities                   | \$ 3,415,174              | \$ 4,528,425 | \$ 4,759,453 | \$ 733,848      | \$ 3,922,736 |
| Working capital  | \$ 574,914                | \$ 3,276,072 | \$ 4,216,466 | \$ (279,029 )   | \$ 3,270,667 |
| Total assets   | \$ 4,970,075              | \$ 6,185,501 | \$ 5,340,604 | \$ 1,249,779    | \$ 4,393,126 |
| Long term debt and capital lease obligations, less current portion | \$ 1,671,588              | \$ 1,212,691 | \$ 765,129   | \$ 1,518,322    | \$ 11,091    |
| Stockholders' equity (deficit)                                     | \$ 283,745                | \$ 3,527,507 | \$ 3,912,371 | \$ (1,384,560 ) | \$ 3,550,548 |

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

**General Overview**

We are in the business of personalized health. We are developing tests and products that can help individuals improve and maintain their health through preventive measures. We plan to develop the following types of products: 1) genetic risk assessment tests, 2) preventive (or ameliorative) nutritional products for those individuals at risk, and 3) personalized therapeutics (drug development based in part on genetic information). We will use our intellectual property and expertise to develop products or acquire additional intellectual property that can be leveraged, through collaboration with partners, to address unmet market needs.

Our current commercial strategy is to partner with companies that have sales and marketing capabilities and products or services that complement our own products. We currently have no plans to develop our own sales force; we plan to rely on our strategic partners to promote and distribute our products. The first of these strategic partnerships is the partnership we have with Alticor and its affiliates. The details of this affiliation are described within the section titled "Strategic Alliance and Collaborations" on page 13.

Our revenue model consists of: 1) charging a fee for processing a genetic risk assessment test; and 2) receiving a royalty from sales of products developed with a partner, or profit sharing from product sales. Furthermore, we plan to collaborate with other companies in research and development. In these collaborations, we expect to receive a certain amount of research funding from the partner covering labor, material, overhead and a small amount of profit. Our first such collaboration is with Alticor for the development of personalized nutritional and skincare products.

In March 2003, we entered into a broad strategic alliance with several affiliates of Alticor to develop and market personalized nutritional and skin care products. The alliance utilizes our intellectual property and expertise in genomics to develop personalized consumer products. Alticor has a long history of manufacturing and distributing high quality nutritional supplements and skin care products to a worldwide market through the multi-level marketing channel.

We are devoting most of our resources to the support of the strategic collaboration with Alticor which includes the development of our genetic risk assessment tests to be sold in combination with Alticor's products. A portion of our resources is also devoted to the development of a new product for the periodontal market. Our funding has consisted primarily of research payments from Alticor and trivial royalties from PST®. Additionally, we expect to continue incurring losses as we continue to develop our new tests and products.

The alliance has included an equity investment, multi-year research and development agreements, a licensing agreement with royalties on marketed products, the deferment of outstanding loan repayment and the refinancing of bridge financing obligations. The financial elements of this alliance are described in greater detail in the section titled "Liquidity and Capital Resources" beginning on page 31.

Sufficiency of working capital remains our greatest challenge. The amount of cash generated from research collaborations with Alticor is not adequate to fund our operations, resulting in an annual negative cash burn. The situation is, however, improving as discussed in the "Liquidity and Capital Resources" section beginning on page 31. Our current cash resources, together with additional research agreements, anticipated revenue from product launches, and other arrangements are adequate to fund operations through mid-2007.

**Critical Accounting Policies**

*Critical accounting policies are defined as those that are reflective of significant judgments and uncertainties, and could potentially result in materially different results under different assumptions and conditions. We believe that our most critical accounting policies upon which our financial condition depends, and which involve the most complex or subjective decisions or assessments are:*

*Strategic alliance with Alticor:*

We account for our strategic alliance with Alticor in accordance with Emerging Issues Task Force (EITF) No. 01-1, *Accounting for Convertible Instruments Granted or Issued to a Nonemployee for Goods or Services or a Combination of Goods or Services and Cash* (EITF No. 01-1). Under EITF No. 01-1, the proceeds received from Alticor in connection with the March 5, 2003 transaction must first be allocated to the fair value of the convertible instruments issued. As of March 5, 2003, the fair value of the convertible instruments issued was \$23.7 million; therefore any proceeds received from Alticor in connection with the March 5, 2003 transaction, up to \$23.7 million, will be recorded as equity. As of December 31, 2005, there was \$2.7 million of fair value of convertible instruments that has not been recorded as equity.

*Stock-based compensation:*

We account for our stock-based compensation plans under Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB No. 25). Under APB No. 25, no stock-based compensation is reflected in net income, as all options granted under the plans had an exercise price equal to the market value of the underlying common stock on the date of grant and the related number of shares granted is fixed at that point in time. The following table illustrates the effect on net loss and loss per common share if we had applied the fair value recognitions provisions of Statement of Financial Standard (SFAS) No. 123, *Accounting for Stock-Based Compensation*, as amended by SFAS No. 148, *Accounting for Stock-Based Compensation-Transition and Disclosure*, issued in December 2002. The stock compensation expense in the below table recognizes the expense over the vesting period of the stock options.

|   | <b>Years Ended December 31,</b> |                 |                  |
|---|---------------------------------|-----------------|------------------|
|   | <b>2005</b>                     | <b>2004</b>     | <b>2003</b>      |
| Net loss attributable to common stockholders: |                                 |                 |                  |
| As reported                                   | \$ (6,570,824 )                 | \$ (7,246,202 ) | \$ (14,653,641 ) |
| Stock-based employee compensation             | (583,941 )                      | (874,847 )      | (1,145,079 )     |
| Pro forma                                     | \$ (7,154,765 )                 | \$ (8,121,049 ) | \$ (15,798,720 ) |
| Basic and diluted net loss per common share:  |                                 |                 |                  |
| As reported                                   | \$ (0.28 )                      | \$ (0.31 )      | \$ (0.63 )       |
| Pro forma                                     | \$ (0.30 )                      | \$ (0.35 )      | \$ (0.68 )       |

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model, for a stock that does not pay dividends with the following assumptions.

|                         | <b>Years Ended December 31,</b> |   |             |   |             |   |
|-------------------------|---------------------------------|---|-------------|---|-------------|---|
|                         | <b>2005</b>                     |   | <b>2004</b> |   | <b>2003</b> |   |
| Risk-free interest rate | 5.00                            | % | 4.00        | % | 4.00        | % |
| Expected life           | 7 years                         |   | 7 years     |   | 7 years     |   |
| Expected volatility     | 70                              | % | 80          | % | 80          | % |

The Black-Scholes option-pricing model was developed for use in estimating the fair value of traded options. Our employee stock options have characteristics significantly different from those of traded options such as extremely limited transferability and, in most cases, vesting restrictions. In addition, the assumptions used in option valuation models (see above) are based upon historical averages that may not predict future results, particularly the expected stock price volatility of the underlying stock. Because changes in these input assumptions can materially affect the fair value estimate, in management's opinion, existing valuation models do not provide a reliable, single measure of the fair value of our employee stock options.

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (Revised 2004), *Share-Based Payment* (SFAS No. 123R). The statement replaces SFAS No. 123, *Accounting for Stock-Based Compensation* and supersedes Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*. SFAS No. 123R addresses all forms of share-based payment (SBP) awards, including shares issued under employee stock purchase plans, stock options, restricted stock and stock appreciation rights. SFAS No. 123R will require the Company to expense SBP awards with compensation cost for SBP transactions measured at fair value. SFAS No. 123R applies to new equity awards and to equity awards modified, repurchased or canceled after the effective date. Additionally, compensation cost for the portion of awards for which the requisite service has not been rendered that are outstanding as of the effective date shall be recognized as the requisite service is rendered on or after the effective date. The compensation cost for that portion of awards shall be based on the grant-date fair value of those awards as calculated from the pro forma disclosures under SFAS No. 123. Additionally, common stock purchased pursuant to the Company's employee stock purchase plan will be expensed based upon the fair market value in excess of purchase price. SFAS No. 123R requires us to adopt the new accounting provisions beginning in 2006. The adoption of SFAS No. 123R will have a material impact on our results of operations. Future results will be impacted by the number and value of additional equity awards as well as the value of existing unvested equity awards. As of December 31, 2005, the value of existing unvested equity awards are scheduled to vest as follows:

| <b>Year Ending December 31,</b> |              |
|---------------------------------|--------------|
| 2006                            | \$ 503,777   |
| 2007                            | 490,511      |
| 2008                            | 429,709      |
| 2009                            | 97,376       |
|                                 | \$ 1,521,373 |

*Income taxes:*

The preparation of our consolidated financial statements requires us to estimate our income taxes in each of the jurisdictions in which we operate, including those outside the United States, which may be subject to certain risks that ordinarily would not be expected in the United States. The income tax accounting process involves estimating our actual current exposure together with assessing temporary differences resulting from differing treatment of items, such as deferred revenue, for tax and accounting purposes. These differences result in the recognition of deferred tax assets and liabilities. We must then record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized.

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against deferred tax assets. We have recorded a full valuation allowance against our deferred tax assets of \$18.4 million as of December 31, 2005, due to uncertainties related to our ability to utilize these assets. The valuation allowance is based on our estimates of taxable income by jurisdiction in which we operate and the period over which our deferred tax assets will be recoverable. In the event that actual results differ from these estimates or we adjust these estimates in future periods we may need to adjust our valuation allowance which could materially impact our financial position and results of operations.

## Results of Operations

### *Comparison of Year Ended December 31, 2005 to Year Ended December 31, 2004*

Revenue for the year ended December 31, 2005 was \$23,000 compared to \$35,000 for the year ended December 31, 2004, a decrease of \$12,000 or 34%. Royalties on PST® sales were \$10,000 (797 tests) and \$18,000 (1,719 tests) for 2005 and 2004, respectively. Licensing revenue was \$10,000 and \$16,000 for 2005 and 2004, respectively. 2005 revenue included \$3,000 from genotyping tests processed in our commercial laboratory.

Research and development expenses were \$3.1 million for the year ended December 31, 2005 compared to \$4.1 million for the year ended December 31, 2004, a decrease of \$963,000 or 24%. Funded research and development expenses were \$1.5 million for the year ended December 31, 2005 compared to \$2.7 million for the year ended December 31, 2004 a decrease of \$1.2 million or 46%. In March 2003, we entered into a research agreement with Alticor to develop genetic tests and software to assess personalized risk and develop and use screening technologies to validate the effectiveness of the nutrigenomic consumables Alticor is developing. Additionally, we will play a key role in enhancing and maintaining scientific credibility in academic and medical communities. After our initial focus in developing products for the United States and Canada, we expect that we will expand our focus to include developing nutrigenomic products for sale overseas and developing products in the United States and overseas in other area of wellness and skin care. This agreement expired in March 2005. In March 2005, we entered into two new agreements with Alticor to continue the research being performed. Direct expenses associated with these agreements were \$987,000 and \$1.9 million for the years ended December 31, 2005 and 2004, respectively. In June 2004, we entered into another research agreement with Alticor to conduct research into the development of a test to identify individuals with specific genetic variations that affect how people gain and maintain weight. Research and development expenses associated with this agreement were \$412,000 and \$673,000 for the years ended December 31, 2005 and 2004, respectively. In addition, during 2005 and 2004, we conducted genotyping tests for Alticor for research purposes. The costs associated with these tests were \$66,000 for the year ended December 31, 2005 and \$90,000 for the same period in 2004. Other research and development expenses, including overhead costs associated with research and development activities were \$1.7 million for the year ended December 31, 2005 compared to \$1.4 million for the year ended December 31, 2004, an increase of \$276,000 or 20%. This increase was largely attributable to the addition of the Chief Medical Officer in July 2005.

Selling, general and administrative expenses were \$3.0 million for the year ended December 31, 2005 compared to \$2.7 million for the prior year, an increase of \$296,000 or 11%. Selling, general and administrative expenses for the year ended December 31, 2005 includes professional fees of \$247,000 for compliance with Section 404 of the Sarbanes-Oxley Act of 2002 for fiscal year 2004 and \$215,000 for fiscal year 2005. There were no professional fees incurred during the year ended December 31, 2004 for compliance with Section 404 of the Sarbanes-Oxley Act of 2002. In addition, selling, general and administrative expenses for the year ended December 31, 2005 include a placement fee for the Chief Medical Officer position of \$54,000, which was filled in late June 2005. These expenses were offset in part by reductions in corporate overhead.

Interest income was \$132,000 for the year ended December 31, 2005 compared to \$58,000 for 2004. The increase is primarily the result of an increase in the interest rate. Interest expense of \$183,000 was incurred during the year ended December 31, 2005, compared to \$140,000 in 2004. The increase is primarily due to the increase in the prime rate over the two periods from 4.00% in 2004 to 6.75% in 2005.

We recorded amortization of note discount of \$462,000 for each of the years ended December 31, 2005 and 2004. Of the \$462,000 expense, \$311,000 is due to the amortization of the \$1.5 million of discount resulting from the beneficial conversion feature of the convertible debt issued in March 2003 and \$151,000 is due to the amortization of the \$732,000 of discount associated with the below market stated interest rate.

*Comparison of Year Ended December 31, 2004 to Year Ended December 31, 2003*

Revenue for the year ended December 31, 2004 was \$35,000 compared to \$54,000 for the year ended December 31, 2003, a decrease of \$19,000 or 36%. Royalties on PST® sales were \$18,000 (1,719 tests) and \$21,000 (1,803 tests) for 2004 and 2003, respectively. Both years include licensing revenue of \$16,000. Revenue of \$17,000 associated with a one-time funded study was included for the year ended December 31, 2003.

Research and development expenses were \$4.1 million for the year ended December 31, 2004 compared to \$3.5 million for the year ended December 31, 2003, an increase of \$620,000 or 18%. Funded research and development expenses were \$2.7 million for the year ended December 31, 2004 compared to \$1.4 million for the year ended December 31, 2003, an increase of \$1.3 million or 89%. In March 2003, we entered into a research agreement with Alticor to develop genetic tests and software to assess personalized risk and develop and use screening technologies to validate the effectiveness of the nutrigenomic consumables Alticor is developing. Additionally, we will play a key role in enhancing and maintaining scientific credibility in academic and medical communities. After our initial focus in developing products for the United States and Canada, we expect that we will expand our focus to include developing nutrigenomic products for sale overseas and developing products in the United States and overseas in other area of wellness and skin care. Research and development expenses associated with this agreement were \$1.9 million and \$1.4 million for the years ended December 31, 2004 and 2003, respectively. In June 2004, we entered into another research agreement with Alticor to conduct research into the development of a test to identify individuals with specific genetic variations that affect how people gain and maintain weight. Research and development expenses associated with this agreement were \$673,000 for the year ended December 31, 2004. In addition, during 2004 and 2003, we conducted genotyping tests for Alticor for research purposes. The costs associated with these tests were \$90,000 for the year ended December 31, 2004 and \$52,000 for the same period in 2003.

Unfunded research and development expenses were \$1.4 million for the year ended December 31, 2004 compared to \$2.0 million for the year ended December 31, 2003, a decrease of \$645,000 or 32%. The decrease in unfunded research and development expenses reflects a re-allocation of internal resources from internally funded projects to the funded research projects. This decrease was partially offset by expenses associated with developing our clinical genetic testing laboratory.

Selling, general and administrative expenses were \$2.7 million for the year ended December 31, 2004 compared to \$2.4 million for the prior year, an increase of \$215,000 or 9%. This increase is primarily the result of adding the appropriate infrastructure in our efforts to develop other markets for our products.

Interest income was \$58,000 for the year ended December 31, 2004 compared to \$49,000 for 2003. Interest expense of \$140,000 was incurred during the year ended December 31, 2004, compared to \$145,000 in 2003. The decrease is primarily due to the lower interest rate as a result of the refinancing transaction with Alticor completed in July 2003 offset by a slight increase in the Bank's prime rate over the two periods.

We recorded amortization of note discount of \$462,000 for the year ended December 31, 2004 in comparison to \$595,000 in 2003. Of the \$462,000 expense in 2004, \$311,000 is due to the amortization of the \$1.5 million of discount resulting from the beneficial conversion feature of the convertible debt issued in March 2003 and \$151,000 is due to the amortization of the \$732,000 of discount associated with the below market stated interest rate on the same debt. Of the \$545,000 expense in 2003, \$259,000 is due to the amortization of the \$1.5 million of discount resulting from the beneficial conversion feature of the convertible debt issued in March 2003, \$126,000 is due to the amortization of the \$732,000 of discount associated with the below market stated interest rate on the same debt and \$210,000 is due to the amortization of the value of the warrants issued in connection with certain promissory notes in August 2002, which were retired in July 2003.



## Liquidity and Capital Resources

Cash is one of the key financial performance indicators for us. As of December 31, 2005, we had cash and cash equivalents of \$3.4 million. Net cash used in operating activities was \$4.2 million and \$5.9 million during the years ended December 31, 2005 and 2004. Cash was used primarily to fund operations.

Investing activities used cash of \$257,000 in 2005 and \$1.1 million in 2004. Cash was used primarily for the purchase of equipment and capitalized patent costs. During 2004, cash was used to purchase fixed assets and to fund the development of intellectual property. Specifically, we completed the construction of our clinical genetic testing laboratory to process the tests from our product launches.

Financing activities provided cash of \$3.3 million for the year ended December 31, 2005 compared to \$6.8 million for the year ended December 31, 2004. During 2005, we received \$2.7 million from our strategic alliance with Alticor and \$614,000 from the exercise of stock options and stock purchases through the employee stock purchase plan. These amounts were offset by \$14,000 of payments of our capital lease obligations. During 2004, we received \$6.2 million from our strategic alliance with Alticor and \$707,000 from the exercise of stock options and stock purchases through the employee stock purchase plan. We currently do not have any commitments for any material capital expenditures. Our obligations at December 31, 2005 for capital lease payments totaled \$3,000. These capital lease obligations mature through March 2006 at various interest rates.

A summary of our contractual obligations as of December 31, 2005 is included in the table below:

| Contractual Obligations     | Payments Due By Period |                     |                     |                   |                      |
|-----------------------------|------------------------|---------------------|---------------------|-------------------|----------------------|
|                             | Total                  | Less than<br>1 Year | 1-3 Years           | 3-5 Years         | More than<br>5 Years |
| Long-Term Debt Obligations  | \$ 2,595,336           | \$                  | \$ 2,595,336        | \$                | \$                   |
| Capital Lease Obligations   | 3,017                  | 3,017               |                     |                   |                      |
| Operating Lease Obligations | 1,434,996              | 444,504             | 881,241             | 109,251           |                      |
| <b>TOTAL</b>                | <b>\$ 4,033,349</b>    | <b>\$ 447,521</b>   | <b>\$ 3,476,577</b> | <b>\$ 109,251</b> | <b>\$</b>            |

In March 2003, we entered into a broad strategic alliance with Alticor to develop and market personalized nutritional and skin care products. As part of the strategic alliance, we entered into a research agreement (Research Agreement I) with Alticor, governing the terms of developing and validating nutrigenomic and dermagenomic tests and products. Alticor provided us with \$5.0 million during the twenty-four months ending March 2005, to conduct certain research projects. In addition, Alticor made available a \$1.5 million working capital credit line to initiate selected research agreements with third parties through March 2005 (Research Loans).

In June 2004, we entered into a research agreement (Research Agreement II) with Alticor, valued at \$2.2 million, as amended, to conduct research into the development of a test to identify individuals with specific genetic variations that affect how people gain and maintain weight. During the first phase of the agreement, we received \$1.4 million in research funding over a period of six months beginning on July 1, 2004. If Alticor determines, in its sole discretion, that it has a reasonable likelihood of commercializing weight management nutritional products, we will be eligible to receive, during the second phase of the agreement, an additional \$820,000 in funding over a six-month period.

In March 2005, we entered into an agreement with Alticor to expand the research being performed under Research Agreement I (Research Agreement III) to provide additional funding of \$2.7 million over the two years beginning April 1, 2005. Also in March 2005, we entered into an additional research agreement (Research Agreement IV) with Alticor for exploratory research valued at \$2.3 million over a two-year period commencing April 1, 2005. These research agreements are expected to provide us with a total of \$5.0 million during the two-year period ending March 2007.

In addition, in April 2005, Alticor paid us \$2.0 million as an advance payment for genetic risk assessment tests to be processed under the terms of the Distribution Agreement. Further, Alticor agreed to extend the drawdown period of the Research Loans through 2007.

In February 2006, we entered into an agreement with Alticor to provide us with access to an additional \$2.0 million of working capital borrowing at any time prior to April 1, 2007. Any amounts borrowed will bear interest at prime plus 1%, require quarterly interest payments and be due five years from the date of borrowing. Also in February 2006, Alticor amended the Research Loans to remove certain restrictions to permit us to use the loans for general working capital purposes.

We believe our current cash resources, together with additional research agreements, anticipated revenue from product launches, and other arrangements are adequate to fund operations through mid-2007.

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

As of December 31, 2005, the only financial instruments we carried were cash and cash equivalents. We believe the market risk arising from holding these financial instruments is immaterial.

Some of our sales and some of our costs occur outside the United States and are transacted in foreign currencies. Accordingly, we are subject to exposure from adverse movements in foreign currency exchange rates. At this time we do not believe this risk is material and we do not currently use derivative financial instruments to manage foreign currency fluctuation risk. However, if foreign sales increase and the risk of foreign currency exchange rate fluctuation increases, we may in the future consider utilizing derivative instruments to mitigate these risks.

**Item 8.** *Financial Statements and Supplementary Data*

The Consolidated Financial Statements of the Company, together with the Reports of Independent Registered Public Accounting Firm, see the Index to Financial Statements on page F-1 of this report.

**Item 9.** *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

**Item 9A.** *Controls and Procedures*

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this Annual Report on Form 10-K, have concluded that, based on such evaluation, our disclosure controls and procedures were adequate and effective to ensure that material information relating to us, including our consolidated subsidiaries, was made known to them by others within those entities, particularly during the period in which this Annual Report on Form 10-K was being prepared.

In designing and evaluating our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

(b) *Changes in Internal Controls.* Management and our independent accountants identified several material weaknesses in our internal control over financial reporting for the year ended December 31, 2004. Because of these material weaknesses, management believed and our independent accountants agreed that, as of December 31, 2004, the Company's internal control over financial reporting was not effective.

We disclosed these material weaknesses in each of the first three quarters of fiscal 2005 and took steps to remediate those material weaknesses through the fourth quarter of fiscal 2005. During the fourth quarter of fiscal 2005, we completed our testing of the design and operating effectiveness of the remediated controls and concluded that the material weaknesses were remediated.

Prior to the fourth quarter of fiscal 2005, we strengthened our internal control over financial reporting and our control environment, taking the following actions:

- Engaged a consultant to assist in the evaluation of internal controls in fiscal 2005 and the documentation of the tests performed to provide reasonable assurance that the controls are designed and operating effectively.
- Implemented new procedures that require documentation of evidence, such as signatures of reviews performed.
- Implemented new procedures requiring the documentation of the application of U.S. GAAP for any significant transactions and the review of such documentation by persons with the adequate knowledge and expertise with respect to the requirements and application of U.S. GAAP.
- Reorganized certain accounting functions, emphasizing segregation of duties and review processes. In addition, implemented compensating controls such as direct management oversight and review where resource constraints compromise the ability to segregate duties.

As many of the changes we made to our controls and control environment during fiscal 2005 are ongoing in nature, they may lead to future improvements; however we do not expect any of these future incremental improvements to materially affect our current internal control over financial reporting.

#### **Management's Report of Internal Control Over Financial Reporting**

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended, as a process designed by, or under the supervision of, the company's principal executive and principal financial officers and effected by the company's board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

The Company's internal control over financial reporting includes those policies and procedures that:

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our chief executive officer and chief accounting officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control - Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2005. Management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2005 has been attested to by Grant Thornton LLP, the Company's independent registered public accounting firm, as stated in their report, which is set forth beginning on page F-3.

**Item 9B.**      *Other Information*

Not applicable.

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**PART III**

**Item 10.** *Directors and Executive Officers of the Registrant*

Information required under this Item will be contained in our Proxy Statement for the 2006 Annual Meeting of Stockholders that will be filed with the Securities and Exchange Commission on or before April 30, 2006, which is incorporated herein by reference under the sections entitled Management , Compliance with 16(a) of the Securities Exchange Act of 1934 , and Code of Conduct and Ethics .

**Item 11.** *Executive Compensation*

Information required under this Item will be contained in our Proxy Statement for the 2006 Annual Meeting of Stockholders that will be filed with the Securities and Exchange Commission on or before April 30, 2006, which is incorporated herein by reference under the section entitled Executive Compensation .

**Item 12.** *Security Ownership of Certain Beneficial Owners and Management*

Information required under this Item will be contained in our Proxy Statement for the 2006 Annual Meeting of Stockholders that will be filed with the Securities and Exchange Commission on or before April 30, 2006, which is incorporated herein by reference under sections entitled Security Ownership of Certain Beneficial Owners and Management and Equity Compensation Plan Information .

**Item 13.** *Certain Relationships and Related Transactions*

Information required under this Item will be contained in our Proxy Statement for the 2006 Annual Meeting of Stockholders that will be filed with the Securities and Exchange Commission on or before April 30, 2006, which is incorporated herein by reference under the section entitled Certain Relationships and Related Transactions .

**Item 14.** *Principal Accountant Fees and Services*

Information required under this Item will be contained in our Proxy Statement for the 2006 Annual Meeting of Stockholders that will be filed with the Commission on or before April 30, 2006, which is incorporated herein by reference under the section entitled Ratification of Appointment of Independent Public Accountants .

**PART IV**

**Item 15.** *Exhibits and Financial Statement Schedules*

(a) Documents Filed as Part of Report

1. Financial Statements:

The Consolidated Financial Statements of the Company and the related reports of the Company's independent registered public accounting firm thereon have been filed under Item 8 hereof.

2. Financial Statement Schedules:

The information required by this item is not applicable or has been included in the consolidated financial statements and related notes thereto.

3. Exhibits:

The exhibits listed below are filed as part of or incorporated by reference in this report. Where such filing is incorporated by reference to a previously filed document, such document is identified in parentheses.

| <b>Exhibit No.</b> | <b>Identification of Exhibit</b>  |
|--------------------|---|
| 3.1                | Articles of Incorporation of the Company, as amended (incorporated herein by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)   |
| 3.2                | Bylaws of the Company, as adopted on June 5, 2000 (incorporated herein by reference to Exhibit 3.2 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)  |
| 3.3                | Certificate of Designations, Preferences and Rights of Series A Preferred Stock (incorporated herein by reference to Exhibit 3.1 of the Company's Current Report filed on Form 8-K on March 5, 2003)  |
| 3.4                | Certificate of Amendment to Certificate of Incorporation, as filed with the Delaware Secretary of State on August 5, 2003 (incorporated herein by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q filed on November 12, 2003) |
| 4.1                | Form of Stock Certificate representing Common Stock, \$0.001 par value, of the Company (incorporated herein by reference to Exhibit 4.1 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)   |
| 10.1@              | Interleukin Genetics, Inc. 1996 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.17 of the Company's Registration Statement No. 333-37441 on Form SB-2 filed October 8, 1997)  |
| 10.2@              | Amendment to the Interleukin Genetics, Inc. 1996 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.18 of the Company's Registration Statement No. 333-37441 on Form SB-2 filed October 8, 1997)                                   |
| 10.3@              | Form of Stock Option Agreement (incorporated herein by reference to Exhibit 10.19 of the Company's Registration Statement No. 333-37441 on Form SB-2 filed October 8, 1997)   |
| 10.4@              | Stock Option Exercise Agreement (incorporated herein by reference to Exhibit 10.20 of the Company's Registration Statement No. 333-37441 on Form SB-2 filed October 8, 1997)  |
| 10.5@              | Non-Qualified Stock Option Agreement dated June 1, 1999, between the Company and Philip R. Reilly (incorporated herein by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-QSB filed August 16, 1999)                           |

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- 10.6+ Research and Technology Transfer Agreement dated effective July 1, 1999, between the Company and the University of Sheffield (incorporated herein by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-QSB filed November 15, 1999)
- 10.7+ Research Support Agreement dated effective July 1, 1999, between the Company and the University of Sheffield (incorporated herein by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-QSB filed November 15, 1999)
- 10.8+ Consulting Agreement dated effective July 1, 1999, between the Company and Gordon Duff, PhD, FRCP (incorporated herein by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-QSB filed November 15, 1999)
- 10.9@ Non-Qualified Stock Option Agreement dated November 30, 1999 between the Company and Philip R. Reilly (incorporated herein by reference to Exhibit 4.5 of the Company's Registration Statement No. 333-32538 on Form S-8 filed March 15, 2000)
- 10.10@ Employment Agreement dated December 1, 1999 between the Company and Kenneth S. Kornman (incorporated herein by reference to Exhibit 10.25 of the Company's Annual Report on Form 10-K filed April 15, 2000)
- 10.11@ Employment Agreement dated April 1, 2000 between the Company and Philip R. Reilly. (incorporated herein by reference to Exhibit 10.26 of the Company's Annual Report on Form 10-K filed on April 15, 2000)
- 10.12@ 2000 Employee Stock Compensation Plan for the Company (incorporated herein by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)
- 10.13@ Form of Nonqualified Stock Option Grant (incorporated herein by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)
- 10.14@ Form of Incentive Stock Option Grant (incorporated herein by reference to Exhibit 10.5 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)
- 10.15 Note Purchase Agreement between the Company and Pyxis Innovations Inc. dated October 22, 2002 (incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on October 28, 2002)
- 10.16 Security Agreement between the Company and Pyxis Innovations Inc. dated October 22, 2002 (incorporated herein by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on October 28, 2002)
- 10.17 Form of Common Stock Purchase Warrant (incorporated herein by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q filed on November 7, 2002)
- 10.18 Registration Rights Agreement dated August 9, 2002 (incorporated herein by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q filed on November 7, 2002)
- 10.19 Stock Purchase Agreement between the Company and Pyxis Innovations Inc. dated March 5, 2003 (incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.20 Amendment No. 3 to Note Purchase Agreement between the Company and Pyxis Innovations Inc., dated March 5, 2003 (incorporated herein by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on March 5, 2003)

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- 10.21 Amendment No. 2 to the Security Agreement between the Company and Pyxis Innovations Inc., dated March 5, 2003 (incorporated herein by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.22 Form of Amended and Restated Promissory Note (incorporated herein by reference to Exhibit 10.4 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.23 Amendment No. 2 to Note Purchase Agreement between the Company and Pyxis Innovations Inc. (incorporated herein by reference to Exhibit 10.5 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.24+ Research Agreement between the Company and Access Business Group dated March 5, 2003 (incorporated herein by reference to Exhibit 10.6 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.25+ Exclusive License Agreement between the Company and Access Business Group dated March 5, 2003 (incorporated herein by reference to Exhibit 10.7 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.26 Registration Rights Agreement between the Company and Pyxis Innovations Inc. dated March 5, 2003 (incorporated herein by reference to Exhibit 10.8 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.27@ Amendment No. 1 to the Employment Agreement with Philip R. Reilly (incorporated herein by reference to Exhibit 10.9 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.28@ Amendment to the Employment Agreement with Kenneth Kornman (incorporated herein by reference to Exhibit 10.11 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.29@ Form of Director's Indemnity Agreement dated March 5, 2003 (incorporated herein by reference to Exhibit 10.13 of the Company's Current Report on Form 8-K filed on March 5, 2003)
- 10.30 Commercial Lease Agreement between the Company and Clematis LLC dated February 13, 2004 (incorporated herein by reference to Exhibit 10.44 of the Company's Annual Report on Form 10-K filed on March 29, 2004)
- 10.31+ Distribution Agreement with the Company and Access Business Group International LLC, dated February 26, 2004 (incorporated herein by reference to Exhibit 10.45 of the Company's Annual Report on Form 10-K filed on March 29, 2004)
- 10.32+ Research Agreement by and between the Company and Access Business Group LLC dated June 17, 2004 (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed on August 10, 2004)
- 10.33 Interleukin Genetics, Inc. 2004 Employee, Director and Consultant Stock Plan (incorporated by reference to Exhibit 99.1 of the Company's Registration Statement No. 333-118551 on Form S-8 filed on August 25, 2004)
- 10.34+ Amendment #1 to Research Agreement by and between the Company and Access Business Group LLC dated June 17, 2004 (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed on November 3, 2004)

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- 10.35+ Research Agreement by and between the Company and Access Business Group LLC dated March 5, 2005 (incorporated by reference to Exhibit 10.38 of the Company's Annual Report on Form 10-K filed on April 26, 2005)
  - 10.36+ Research Agreement by and between the Company and Access Business Group LLC dated March 5, 2005 (incorporated by reference to Exhibit 10.39 of the Company's Annual Report on Form 10-K filed on April 26, 2005)
  - 10.37 First Amendment to Distribution Agreement with the Company and Access Business Group International LLC, dated February 28, 2005 (incorporated by reference to Exhibit 10.40 of the Company's Annual Report on Form 10-K filed on April 26, 2005)
  - 10.38 Second Amendment to Stock Purchase Agreement between the Company and Pyxis Innovations Inc. dated February 28, 2005 (incorporated by reference to Exhibit 10.41 of the Company's Annual Report on Form 10-K filed on April 26, 2005)
  - 21.1\* Subsidiaries of the Company
  - 23.1\* Consent of Independent Registered Public Accounting Firm
  - 31.1\* Certification of Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002
  - 31.2\* Certification of Principal Financial Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002
  - 32\* Certification pursuant to Section 906 of Sarbanes-Oxley Act of 2002
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\* Filed herewith.

+ The Securities and Exchange Commission with respect to certain portions of this exhibit has previously granted confidential treatment. Omitted portions have been filed separately with the Securities and Exchange Commission.

++ Confidential treatment requested as to certain portions of the document, which portions have been omitted and filed separately with the Securities and Exchange Commission.

@ Management contract or compensatory plan, contract or arrangement

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**SIGNATURES**

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

INTERLEUKIN GENETICS, INC.

By:

/s/ PHILIP R. REILLY  
 Philip R. Reilly  
*Chairman of the Board of Directors and  
 Chief Executive Officer*

Date: March 16, 2006

In accordance with the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

| <b>Signatures</b>                                    | <b>Title</b>   | <b>Date Signed</b> |
|--|--|--------------------|
| /s/ PHILIP R. REILLY<br>Philip R. Reilly             | Chairman of the Board of Directors and<br>Chief Executive Officer (Principal Executive<br>Officer) | March 16, 2006     |
| /s/ JOHN J. MCCABE<br>John J. McCabe                 | Chief Accounting Officer &<br>Controller (Principal Financial and<br>Accounting officer)           | March 16, 2006     |
| /s/ GEORGE CALVERT<br>George Calvert                 | Director   | March 16, 2006     |
| /s/ THOMAS R. CURRAN, JR.<br>Thomas R. Curran, Jr.   | Director   | March 16, 2006     |
| /s/ WILLIAM J. VIVEEN, JR.<br>William J. Viveen, Jr. | Director   | March 16, 2006     |

**INTERLEUKIN GENETICS, INC. AND SUBSIDIARY**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

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**Report of Independent Registered Public Accounting Firm**

Board of Directors and Shareholders  
Interleukin Genetics, Inc.

We have audited the accompanying consolidated balance sheets of Interleukin Genetics, Inc. (the Company) (a Delaware corporation), as of December 31, 2005 and 2004, 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, 2005. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Interleukin Genetics, Inc. as of December 31, 2005 and 2004, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2005 in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Interleukin Genetics, Inc.'s internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 10, 2006, expressed an unqualified opinion on management's assessment and an unqualified opinion on internal control effectiveness.

/s/ GRANT THORNTON LLP  
Boston, Massachusetts  
March 10, 2006

**Report of Independent Registered Public Accounting Firm**

Board of Directors and Shareholders  
Interleukin Genetics, Inc.

We have audited management's assessment included in the accompanying Management's Report of Internal Control Over Financial Reporting appearing under Item 9A of Form 10-K, that Interleukin Genetics, Inc. (the Company) (a Delaware corporation) maintained effective internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Interleukin Genetics, Inc. maintained effective internal control over financial reporting as of December 31, 2005, is fairly stated, in all material respects, based on criteria established in Internal Control - Integrated Framework issued by COSO. Also in our opinion, Interleukin Genetics, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control - Integrated Framework issued by COSO.

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We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Interleukin Genetics, Inc. as of December 31, 2005 and 2004 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, 2005 and our report dated March 10, 2006 expressed an unqualified opinion on those financial statements.

/s/ GRANT THORNTON LLP

Boston, Massachusetts  
March 10, 2006

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## INTERLEUKIN GENETICS, INC. AND SUBSIDIARY

## CONSOLIDATED BALANCE SHEETS

|  | December 31,<br>2005 | 2004                |
|--|----------------------|---------------------|
| <b>ASSETS</b>  |                      |                     |
| <b>Current assets:</b>   |                      |                     |
| Cash and cash equivalents  | \$ 3,415,174         | \$ 4,528,425        |
| Accounts receivable, net of allowance for doubtful accounts of \$0 in 2005 and 2004  | 278                  | 10,131              |
| Prepaid expenses and other current assets  | 174,204              | 182,819             |
| Total current assets   | 3,589,656            | 4,721,375           |
| <b>Fixed assets, net</b>   | <b>956,828</b>       | <b>1,142,087</b>    |
| <b>Other assets, net</b>   | <b>423,591</b>       | <b>322,039</b>      |
| <b>Total Assets</b>  | <b>\$ 4,970,075</b>  | <b>\$ 6,185,501</b> |
| <b>LIABILITIES AND STOCKHOLDERS EQUITY</b>   |                      |                     |
| <b>Current liabilities:</b>  |                      |                     |
| Accounts payable   | \$ 170,474           | \$ 94,780           |
| Accrued expenses   | 520,512              | 914,907             |
| Deferred receipt   | 2,002,760            | 12,760              |
| Commitments for funded research and development projects   | 318,019              | 408,544             |
| Current portion of capital lease obligations   | 2,977                | 14,312              |
| Total current liabilities  | 3,014,742            | 1,445,303           |
| <b>Convertible debt, net of discount of \$923,748 and \$1,385,623 in 2005 and 2004, respectively</b>   | <b>1,671,588</b>     | <b>1,209,713</b>    |
| <b>Capital lease obligations, less current portion</b>   |                      | <b>2,978</b>        |
| Total liabilities  | 4,686,330            | 2,657,994           |
| <b>Stockholders equity:</b>  |                      |                     |
| Convertible preferred stock, \$0.001 par value 6,000,000 shares authorized; 5,000,000 shares of Series A issued and outstanding at December 31, 2005 and 2004; aggregate liquidation preference of \$18,000,000 at December 31, 2005 | 5,000                | 5,000               |
| Common stock, \$0.001 par value 75,000,000 shares authorized; 23,927,326 and 23,594,337 shares issued and outstanding at December 31, 2005 and 2004, respectively  | 23,927               | 23,595              |
| Additional paid-in capital   | 61,450,598           | 58,123,868          |
| Accumulated deficit  | (61,195,780)         | (54,624,956)        |
| Total stockholders equity  | 283,745              | 3,527,507           |
| <b>Total liabilities and stockholders equity</b>   | <b>\$ 4,970,075</b>  | <b>\$ 6,185,501</b> |

The accompanying notes are an integral part of these consolidated financial statements.

## INTERLEUKIN GENETICS, INC. AND SUBSIDIARY

## CONSOLIDATED STATEMENTS OF OPERATIONS

|   | For the Years Ended December 31, |                   |                   |
|---|----------------------------------|-------------------|-------------------|
|   | 2005                             | 2004              | 2003              |
| <b>Revenue</b>                                      | \$ 22,877                        | \$ 34,671         | \$ 54,105         |
| <b>Cost of revenue</b>                              |                                  | 351               | 20,658            |
| <b>Gross profit</b>                                 | 22,877                           | 34,320            | 33,447            |
| <b>Operating Expenses:</b>                          |                                  |                   |                   |
| Research and development                            | 3,127,086                        | 4,078,316         | 3,457,861         |
| Selling, general and administrative                 | 2,953,779                        | 2,658,037         | 2,443,219         |
| Total operating expenses                            | 6,080,865                        | 6,736,353         | 5,901,080         |
| <b>Loss from operations</b>                         | (6,057,988 )                     | (6,702,033 )      | (5,867,633 )      |
| <b>Other income (expense):</b>                      |                                  |                   |                   |
| Interest income                                     | 131,656                          | 58,115            | 48,535            |
| Interest expense                                    | (182,617 )                       | (140,410 )        | (144,802 )        |
| Amortization of note discount                       | (461,875 )                       | (461,874 )        | (595,014 )        |
| Total other income (expense), net                   | (512,836 )                       | (544,169 )        | (691,281 )        |
| <b>Net loss</b>                                     | \$ (6,570,824 )                  | \$ (7,246,202 )   | \$ (6,558,914 )   |
| Accretion of convertible preferred stock discount   |                                  |                   | (8,094,727 )      |
| <b>Net loss attributable to common stockholders</b> | \$ (6,570,824 )                  | \$ (7,246,202 )   | \$ (14,653,641 )  |
| <b>Net loss per basic and diluted common share</b>  | \$ (0.28 )                       | \$ (0.31 )        | \$ (0.63 )        |
| <b>Weighted average common shares outstanding</b>   | <b>23,702,967</b>                | <b>23,482,642</b> | <b>23,193,195</b> |

The accompanying notes are an integral part of these consolidated financial statements.

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## INTERLEUKIN GENETICS, INC. AND SUBSIDIARY

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT)

For the Years Ended December 31, 2005, 2004 and 2003

|   | Convertible Preferred Stock |                 | Common Stock      |                   | Additional Paid-in Capital | Accumulated Deficit     | Total             |
|---|-----------------------------|-----------------|-------------------|-------------------|----------------------------|-------------------------|-------------------|
|   | Shares                      | Amount          | Shares            | \$0.001 par value |                            |                         |                   |
| <b>Balance as of December 31, 2002</b>                      |                             |                 | 23,118,249        | 23,119            | 39,412,161                 | (40,819,840 )           | (1,384,560 )      |
| Net loss  |                             |                 |                   |                   |                            | (6,558,914 )            | (6,558,914 )      |
| Investment by Alticor:                                      |                             |                 |                   |                   |                            |                         |                   |
| Series A preferred stock                                    | 5,000,000                   | 5,000           |                   |                   | 6,845,225                  |                         | 6,850,225         |
| Beneficial conversion feature on Series A preferred stock   |                             |                 |                   |                   | 8,094,727                  |                         | 8,094,727         |
| Accretion of Series A preferred stock discount              |                             |                 |                   |                   | (8,094,727 )               |                         | (8,094,727 )      |
| Beneficial conversion feature on convertible debt           |                             |                 |                   |                   | 1,500,609                  |                         | 1,500,609         |
| Below market stated interest rate on convertible debt       |                             |                 |                   |                   | 731,783                    |                         | 731,783           |
| Research funding  |                             |                 |                   |                   | 2,500,000                  |                         | 2,500,000         |
| Other   |                             |                 |                   |                   | 9,000                      |                         | 9,000             |
| Common stock issued:  |                             |                 |                   |                   |                            |                         |                   |
| Exercise of stock options                                   |                             |                 | 135,931           | 136               | 140,462                    |                         | 140,598           |
| Employee stock purchase plan                                |                             |                 | 8,408             | 8                 | 12,042                     |                         | 12,050            |
| Stock options issued to non-employees for services rendered |                             |                 |                   |                   | 111,580                    |                         | 111,580           |
| <b>Balance as of December 31, 2003</b>                      | 5,000,000                   | 5,000           | 23,262,588        | 23,263            | 51,262,862                 | (47,378,754 )           | 3,912,371         |
| Net loss  |                             |                 |                   |                   |                            | (7,246,202 )            | (7,246,202 )      |
| Investment by Alticor:                                      |                             |                 |                   |                   |                            |                         |                   |
| Series A preferred stock                                    |                             |                 |                   |                   | 2,000,000                  |                         | 2,000,000         |
| Research funding  |                             |                 |                   |                   | 3,880,000                  |                         | 3,880,000         |
| Other   |                             |                 |                   |                   | 274,088                    |                         | 274,088           |
| Common stock issued:  |                             |                 |                   |                   |                            |                         |                   |
| Exercise of stock options                                   |                             |                 | 320,751           | 321               | 674,026                    |                         | 674,347           |
| Employee stock purchase plan                                |                             |                 | 10,998            | 11                | 32,892                     |                         | 32,903            |
| <b>Balance as of December 31, 2004</b>                      | 5,000,000                   | 5,000           | 23,594,337        | 23,595            | 58,123,868                 | (54,624,956 )           | 3,527,507         |
| Net loss  |                             |                 |                   |                   |                            | (6,570,824 )            | (6,570,824 )      |
| Investment by Alticor:                                      |                             |                 |                   |                   |                            |                         |                   |
| Research funding  |                             |                 |                   |                   | 2,517,474                  |                         | 2,517,474         |
| Other   |                             |                 |                   |                   | 196,000                    |                         | 196,000           |
| Common stock issued:  |                             |                 |                   |                   |                            |                         |                   |
| Exercise of stock options                                   |                             |                 | 320,342           | 320               | 577,710                    |                         | 578,030           |
| Employee stock purchase plan                                |                             |                 | 12,647            | 12                | 35,546                     |                         | 35,558            |
| <b>Balance as of December 31, 2005</b>                      | <b>5,000,000</b>            | <b>\$ 5,000</b> | <b>23,927,326</b> | <b>\$ 23,927</b>  | <b>\$ 61,450,598</b>       | <b>\$ (61,195,780 )</b> | <b>\$ 283,745</b> |

The accompanying notes are an integral part of these consolidated financial statements.

## INTERLEUKIN GENETICS, INC. AND SUBSIDIARY

## CONSOLIDATED STATEMENTS OF CASH FLOWS

|   | For the Years Ended December 31, |                     |                     |
|---|----------------------------------|---------------------|---------------------|
|   | 2005                             | 2004                | 2003                |
| <b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>                                |                                  |                     |                     |
| Net loss  | \$ (6,570,824 )                  | \$ (7,246,202 )     | \$ (6,558,914 )     |
| Adjustments to reconcile net loss to net cash used in operating activities: |                                  |                     |                     |
| Depreciation and amortization   | 340,237                          | 123,566             | 107,528             |
| Amortization of note discount   | 461,875                          | 461,874             | 595,014             |
| Issuance of stock options to non-employees for services rendered            |                                  |                     | 111,580             |
| Changes in operating assets and liabilities:                                |                                  |                     |                     |
| Accounts receivable, net  | 9,853                            | (4,533 )            | (2,354 )            |
| Prepaid expenses and other current assets                                   | 8,615                            | (68,300 )           | (14,623 )           |
| Accounts payable  | 75,694                           | 24,973              | (198,427 )          |
| Accrued expenses  | (394,395 )                       | 376,716             | 75,220              |
| Deferred receipt  | 1,990,000                        | (16,000 )           | (16,599 )           |
| Commitments for funded research and development projects                    | (90,525 )                        | 408,544             |                     |
| Net cash used in operating activities                                       | (4,169,470 )                     | (5,939,362 )        | (5,901,575 )        |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>                                |                                  |                     |                     |
| Purchases of fixed assets   | (118,057 )                       | (971,991 )          | (19,817 )           |
| Increase in other assets  | (138,473 )                       | (154,667 )          | (103,558 )          |
| Net cash used in investing activities                                       | (256,530 )                       | (1,126,658 )        | (123,375 )          |
| <b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>                                |                                  |                     |                     |
| Proceeds from investment by Alticor, net of issuance costs                  | 2,713,474                        | 6,154,088           | 9,359,225           |
| Proceeds from exercises of stock options                                    | 578,030                          | 674,347             | 140,598             |
| Proceeds from employee stock purchase plan                                  | 35,558                           | 32,903              | 12,050              |
| Increases in notes payable  |                                  |                     | 1,095,336           |
| Repayment of bridge loans   |                                  |                     | (525,000 )          |
| Principal payments of capital lease obligations                             | (14,313 )                        | (26,346 )           | (31,654 )           |
| Net cash provided by financing activities                                   | 3,312,749                        | 6,834,992           | 10,050,555          |
| Net (decrease) increase in cash and cash equivalents                        | (1,113,251 )                     | (231,028 )          | 4,025,605           |
| Cash and cash equivalents, beginning of year                                | 4,528,425                        | 4,759,453           | 733,848             |
| <b>Cash and cash equivalents, end of year</b>                               | <b>\$ 3,415,174</b>              | <b>\$ 4,528,425</b> | <b>\$ 4,759,453</b> |
| <b>Supplemental disclosures of cash flow information:</b>                   |                                  |                     |                     |
| Cash paid for interest  | \$ 182,617                       | \$ 140,410          | \$ 205,151          |
| <b>Supplemental disclosure on noncash investing and financing activity:</b> |                                  |                     |                     |
| Acquisition of fixed assets under capital leases                            | \$                               | \$                  | \$ 32,395           |
| Accretion of convertible preferred stock discount                           | \$                               | \$                  | \$ 8,094,727        |

The accompanying notes are an integral part of these consolidated financial statements.

**INTERLEUKIN GENETICS, INC. AND SUBSIDIARY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**Note 1 Company Background and Uncertainties**

*Organization and Line of Business*

The Company develops genetic risk assessment tests and provides research services to collaborative partners. As of December 31, 2005, the Company has commercially introduced one genetic test and is in various stages of development for several others. Commercial success of genetic risk assessment tests will depend upon their acceptance as medically useful and cost-effective by patients, physicians, dentists, other members of the medical and dental community, and third-party payers.

Research in the field of disease predisposing genes and genetic markers is intense and highly competitive. The Company has many competitors in the United States and abroad that have considerably greater financial, technical, marketing, and other resources available. If the Company does not discover disease predisposing genes or genetic markers and develop genetic risk assessment tests and launch such services or products before their competitors, then revenues may be reduced or eliminated.

The Company's ability to successfully commercialize genetic risk assessment tests depends on obtaining adequate reimbursement for such products and related treatment from government and private healthcare insurers and other third-party payers. Doctors' decisions to recommend genetic risk assessment tests will be influenced by the scope and reimbursement for such tests by third-party payers. If both third-party payers and individuals are unwilling to pay for the test, then the number of tests performed will significantly decrease, therefore resulting in a reduction of anticipated revenue.

The Company was incorporated in Texas in 1986 and re-incorporated in Delaware in March 2000.

**Note 2 Summary of Significant Accounting Policies**

*Principles of Consolidation*

The consolidated financial statements include the accounts of Interleukin Genetics, Inc., and its wholly-owned subsidiary, Interleukin Genetics Laboratory Services, Inc. All intercompany accounts and transactions have been eliminated.

*Management Estimates*

The preparation of 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 disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue and expenses during the reported periods. Actual results could differ from those estimates. The Company's most critical accounting policies are in the areas of its strategic alliance with Alticor, stock-based compensation, income taxes, long-lived assets, intellectual property and beneficial conversion feature of convertible instruments. These critical accounting policies are more fully discussed in these notes to financial statements.

*Strategic Alliance with Alticor*

In a private placement on March 5, 2003, the Company entered into a Stock Purchase Agreement with Alticor, pursuant to which Alticor purchased from the Company 5,000,000 shares of the Company's Series A Preferred Stock, \$0.001 per share, for \$7,000,000 in cash and \$2,000,000 in cash to be paid, if at all, upon the Company reaching a milestone pursuant to the terms of the Stock Purchase Agreement (see

Note 3.). The Series A Preferred Stock issued in the private placement was initially convertible into 28,157,683 shares of the Company's Common Stock at the purchaser's discretion. Pursuant to the terms of the Stock Purchase Agreement, Alticor also agreed to refinance, in the form of convertible debt, certain of the Company's indebtedness in the form of previously issued promissory notes that were held by Alticor and certain individuals. This amounted to \$2,595,336 in debt refinanced and was initially convertible into 5,219,903 shares of the Company's Common Stock. Concurrent with the closing of the Stock Purchase Agreement, the Company entered into a research agreement with Alticor that would provide additional funding of \$5,000,000 to be paid quarterly over a two-year period.

In accordance with EITF No. 01-1, the terms of both the agreement for goods or services provided and the convertible instruments should be evaluated to determine whether their separately stated pricing is equal to the fair value of the goods or services provided and the convertible instruments. If that is not the case, the terms of the respective transactions should be adjusted. The convertible instruments should be recognized at fair value with a corresponding increase or decrease in the sales price of the goods or services.

On March 5, 2003, the Company was obligated to issue up to 33,377,586 shares of its common stock underlying the convertible preferred stock and the convertible debt issued. Based on the last reported trade price of \$0.71 per common share of the Company's common stock on March 5, 2003, the convertible instruments had a fair value of \$23,698,086 on the date of issuance. Based on the fair value of the convertible instruments and the guidance provided by EITF 01-1, the Company will recognize the fair value of the convertible instruments, to the extent of proceeds received, with a corresponding decrease to the sales price of the goods and services provided. At March 5, 2003, the Company treated the \$5,000,000 committed research funding as an equity investment rather than revenue and any costs of performing the research services under the agreement were classified as research and development expenses. Any subsequent proceeds that the Company will receive from Alticor that are linked to the March 2003 transaction, will be considered equity rather than revenue to the extent of the fair value of the convertible instruments at March 5, 2003. In June 2004, the Company entered into another research agreement with Alticor for potential funding up to \$2,200,000 and in March 2005, the Company entered into two more agreements to provide additional funding of \$5,057,651 over two years beginning April 1, 2005 (see Note 3). In addition, since March 5, 2003, the Company has received various purchase orders from Alticor valued at \$501,800 to conduct genotyping test for research purposes. These purchase orders, together with the research agreements entered into in June 2004 and March 2005, are deemed to be linked to the March 2003 transaction, and, accordingly, are treated as equity rather than revenue. As of December 31, 2005, proceeds received from Alticor which were recorded as consideration for the fair value of the convertible instruments issued in March 2003, amounted to \$20,371,898. As of December 31, 2005, there was \$2,726,188 of fair value of the convertible instruments that has not been recorded as equity.

#### *Stock-Based Compensation*

Stock options issued to employees under the Company's stock option and stock purchase plans are accounted for under Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB No. 25). All stock-based awards to non-employees are accounted for at their fair value in accordance with Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123), and EITF Issue No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees*.

The Company applies the disclosure-only alternative of SFAS No. 123, which defines a fair-value-based method of accounting for employee stock options or similar equity instruments. Under the fair-value-based method, compensation cost is measured at the grant date based on the value of the award and is recognized over the service period of the award, which is usually the vesting period. However, SFAS No. 123 also allows entities to continue to measure compensation costs for employee stock compensation

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plans using the intrinsic value method of accounting prescribed in APB No. 25. The Company has elected to continue to follow the accounting prescribed by APB No. 25 and has made the required disclosures prescribed by SFAS No. 123.

Had compensation cost for the Company's employee stock awards been determined consistent with SFAS No. 123, the Company's net loss applicable to common stock and net loss per share would have been as follows:

|  | Years Ended December 31, |                 |                  |
|--|--------------------------|-----------------|------------------|
|  | 2005                     | 2004            | 2003             |
| <b>Net loss attributable to common stockholders:</b> |                          |                 |                  |
| As reported  | \$ (6,570,824 )          | \$ (7,246,202 ) | \$ (14,653,641 ) |
| Stock-based employee compensation                    | (583,941 )               | (874,847 )      | (1,145,079 )     |
| Pro forma  | \$ (7,154,765 )          | \$ (8,121,049 ) | \$ (15,798,720 ) |
| <b>Basic and diluted net loss per common share:</b>  |                          |                 |                  |
| As reported  | \$ (0.28 )               | \$ (0.31 )      | \$ (0.63 )       |
| Pro forma  | \$ (0.30 )               | \$ (0.35 )      | \$ (0.68 )       |

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model, for a stock that does not pay dividends with the following assumptions.

|                         | Years Ended December 31, |   |         |   |         |   |
|-------------------------|--------------------------|---|---------|---|---------|---|
|                         | 2005                     |   | 2004    |   | 2003    |   |
| Risk-free interest rate | 5.00                     | % | 4.00    | % | 4.00    | % |
| Expected life           | 7 years                  |   | 7 years |   | 7 years |   |
| Expected volatility     | 70                       | % | 80      | % | 80      | % |

Using these assumptions, the weighted average grant date fair value of options granted in 2005, 2004 and 2003 was \$2.29, \$2.97 and \$2.69, respectively.

### *Income Taxes*

The preparation of its consolidated financial statements requires the Company to estimate its income taxes in each of the jurisdictions in which it operates, including those outside the United States, which may be subject to certain risks that ordinarily would not be expected in the United States. The income tax accounting process involves estimating its actual current exposure together with assessing temporary differences resulting from differing treatment of items, such as deferred revenue, for tax and accounting purposes. These differences result in the recognition of deferred tax assets and liabilities. The Company must then record a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized.

Significant management judgment is required in determining the Company's provision for income taxes, its deferred tax assets and liabilities and any valuation allowance recorded against deferred tax assets. The Company has recorded a full valuation allowance against its deferred tax assets of \$18.4 million as of December 31, 2005, due to uncertainties related to its ability to utilize these assets. The valuation allowance is based on management's estimates of taxable income by jurisdiction in which the Company operates and the period over which the deferred tax assets will be recoverable. In the event that actual results differ from these estimates or management adjusts these estimates in future periods, the Company may need to adjust its valuation allowance which could materially impact its financial position and results of operations.

*Research and Development*

Research and development costs are expensed as incurred.

*Basic and Diluted Net Loss per Common Share*

The Company applies SFAS No. 128, *Earnings per Share*, which establishes standards for computing and presenting earnings per share. Basic and diluted net loss per share was determined by dividing net loss applicable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Diluted loss per share is the same as basic loss per share for all the periods presented, as the effect of the potential common stock equivalents is anti-dilutive due to the loss in each period. Potential common stock excluded from the calculation of diluted net loss per share consists of stock options, warrants, convertible preferred stock and convertible debt as described in the table below:

|                             | 2005       | 2004       | 2003       |
|-----------------------------|------------|------------|------------|
| Options outstanding         | 2,477,815  | 2,985,474  | 3,180,133  |
| Warrants outstanding        | 525,000    | 525,000    | 525,000    |
| Convertible preferred stock | 28,160,200 | 28,160,200 | 28,157,683 |
| Convertible debt            | 4,060,288  | 4,060,288  | 4,060,288  |
| Total                       | 35,223,303 | 35,730,962 | 35,923,104 |

*Comprehensive Income (Loss)*

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. During the years ended December 31, 2005, 2004 and 2003, there were no items other than net loss included in the comprehensive loss.

*Fair Value of Financial Instruments*

The Company, using available market information, has determined the estimated fair values of financial instruments. The stated values of cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to the short-term nature of these instruments. The carrying amounts of the Company's capital lease obligations also approximate fair value. The carrying amounts of borrowings under short-term agreements approximate their fair value as the rates applicable to the financial instruments reflect changes in overall market interest rates.

The fair value of long-term debt is estimated using discounted cash flow analysis, based on the Company's current incremental borrowing rates for similar types of borrowing arrangements. The carrying amount of borrowing of the Company's long-term debt at December 31, 2005 approximates fair value.

*Cash Equivalents*

Cash equivalents consist of money market deposits at a financial institution in excess of federally insured amounts.

*Fixed Assets*

Fixed assets are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are provided using the straight-line method over estimated useful lives of three to five years. Leasehold improvements are amortized over the life of the lease, or the estimated useful life of the asset, whichever is shorter.

### *Long-Lived Assets*

The Company applies the provisions of SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS No. 144). SFAS No. 144 requires that the Company evaluate its long-lived assets for impairment whenever events or changes in circumstances indicate that carrying amounts of such assets may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted net cash flows expected to be generated by the asset. Any write-downs, based on fair value, are to be treated as permanent reductions in the carrying amount of the assets. The Company believes that no impairment exists related to the Company's long-lived assets at December 31, 2005.

### *Intellectual Property*

Prior to March 2003, costs incurred in connection with patents were expensed as incurred due to the possibility that the Company would never be able to derive any benefits from its patents. The Company has exclusive rights (subject to rights granted to an affiliate of Alticor within the fields of dermagenomics and nutrigenomics) in twenty issued U.S. patents and has a number of U.S. patent applications pending. The Company has also been granted a number of corresponding foreign patents and a number of foreign counterparts of its U.S. patents and patent applications pending. Since inception the Company has expensed approximately \$3.0 million in the effort to obtain patent protection for its intellectual property. Due to the alliance with Alticor Inc. that was entered into on March 5, 2003, the Company began capitalizing certain costs of patents for which the prospect of deriving benefits had become more certain. As of December 31, 2005 and 2004, the Company has capitalized \$452,504 and \$311,466, respectively, in patent costs and is included in other assets on the accompanying consolidated balance sheets. The Company amortizes these costs over the shorter of the life of the patent or ten years, their expected useful life. Accumulated amortization of capitalized patent costs was \$65,331 and \$28,410 at December 31, 2005 and 2004, respectively.

### *Beneficial Conversion Feature of Convertible Instruments*

Based on EITF No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments* (EITF No. 00-27), which provides guidance on the calculation of a beneficial conversion feature of a convertible instrument, the Company has determined that the convertible preferred stock and the convertible debt issued on March 5, 2003 each contained a beneficial conversion feature.

Based on the effective conversion price (which was determined by allocating the proceeds received on March 5, 2003 of \$9,595,336 based on the relative fair value of the convertible securities issued, or \$8,094,727 to the convertible preferred stock and \$1,500,609 to the convertible debt) of the convertible preferred stock of \$0.2875 and the market value per share of \$0.71 at March 5, 2003, the intrinsic value was calculated to be \$11,897,228; however, in accordance with EITF No. 00-27, the amount of the discount allocated to the beneficial conversion feature is limited to the amount of the proceeds allocated to the instrument. This beneficial conversion feature resulted in a discount of the preferred stock of \$8,094,727 at March 5, 2003. The Company accreted this discount on March 5, 2003, the earliest date the stock could be converted.

Based on the effective conversion price of the convertible debt of \$0.2875 and the market value per share of \$0.71 at March 5, 2003, the intrinsic value was calculated to be \$2,205,522; however in accordance with EITF No. 00-27, the amount of the discount allocated to the beneficial conversion feature is limited to the amount of the proceeds allocated to the instrument. The beneficial conversion feature resulted in a discount of the convertible debt of \$1,500,609 at March 5, 2003. The amount of the discount allocated to the beneficial conversion feature of the convertible debt is amortized from the date of issuance to the earlier of the maturity or conversion date. Therefore, the Company charged \$310,471 for each of the years ended December 31, 2005 and 2004 and \$258,726 for the year ended December 31, 2003 to amortization of note discount.

*Below Market Interest Rate*

The convertible debt has a stated interest rate of prime plus 1%. However, the promissory notes, which were refinanced with the convertible debt, originally had a stated interest rate of 15%. Therefore, the Company determined the fair value of the convertible debt, using an interest rate comparable to that of the refinanced promissory notes, at \$1,863,553. The resulting discount of \$731,783 is amortized from the date of issuance to the earlier of maturity or conversion date. Therefore, the Company charged \$151,403 to amortization of note discount for the years ended December 31, 2005 and 2004 and \$126,169 for the year ended December 31, 2003.

*Recent Accounting Pronouncements*

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (Revised 2004), *Share-Based Payment* (SFAS No. 123R). The statement replaces SFAS No. 123, *Accounting for Stock-Based Compensation* and supersedes Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*. SFAS No. 123R addresses all forms of share-based payment (SBP) awards, including shares issued under employee stock purchase plans, stock options, restricted stock and stock appreciation rights. SFAS No. 123R will require the Company to expense SBP awards with compensation cost for SBP transactions measured at fair value. SFAS No. 123R applies to new equity awards and to equity awards modified, repurchased or canceled after the effective date. Additionally, compensation cost for the portion of awards for which the requisite service has not been rendered that are outstanding as of the effective date shall be recognized as the requisite service is rendered on or after the effective date. The compensation cost for that portion of awards shall be based on the grant-date fair value of those awards as calculated from the pro forma disclosures under SFAS No. 123. Additionally, common stock purchased pursuant to the Company's employee stock purchase plan will be expensed based upon the fair market value in excess of purchase price. SFAS No. 123R requires the Company to adopt the new accounting provisions beginning in 2006. The adoption of SFAS No. 123R will have a material impact on the Company's results of operations. Future results will be impacted by the number and value of additional equity awards as well as the value of existing unvested equity awards. As of December 31, 2005, the value of existing unvested equity awards are scheduled to vest as follows:

**Year Ending December 31,**

|      |              |
|------|--------------|
| 2006 | \$ 503,777   |
| 2007 | 490,511      |
| 2008 | 429,709      |
| 2009 | 97,376       |
|      | \$ 1,521,373 |

In March 2005, FASB issued FASB Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations*, which is an interpretation of FAS No. 143, *Accounting for Asset Retirement Obligations*. The interpretation requires a liability for the fair value of a conditional asset retirement obligation to be recognized if the fair value of the liability can be reasonably estimated. The interpretation is effective no later than the end of fiscal years ending after December 15, 2005, and did not have a material impact on our financial position or results of operations.

In June 2005, FASB issued SFAS No. 154, *Accounting Changes and Error Corrections* (SFAS No. 154). This statement replaces APB Opinion No. 20, *Accounting Changes*, and SFAS No. 3, *Reporting Accounting Changes in Interim Financial Statements*. The statement applies to all voluntary changes in accounting for and reporting of changes in accounting principles. SFAS No. 154 requires retrospective application to prior periods' financial statements of a voluntary change in accounting principles unless it is not practical to do so. APB No. 20 previously required that most voluntary changes in accounting principles be recognized by



including in net income of the period of the change the cumulative effect of changing to the new accounting principle. SFAS No. 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. Earlier application is permitted for accounting changes and corrections of errors made occurring in fiscal years beginning after May 31, 2005. The adoption of SFAS No. 154 will not have a material impact on the Company's financial position or results of operations.

**Note 3 Strategic Alliance with Alticor Inc.**

On March 5, 2003, the Company entered into a broad strategic alliance with several affiliates of the Alticor family of companies to develop and market novel nutritional and skin care products. The alliance utilizes Interleukin Genetics' intellectual property and expertise in genomics to develop personalized consumer products. Alticor has a long history of manufacturing and distributing high quality nutritional supplements and skin care products to a worldwide market.

The alliance initially included an equity investment, a multi-year research and development agreement, a licensing agreement with royalties on marketed products, the deferment of outstanding loan repayment and the refinancing of bridge financing obligations. The major elements of the initial alliance were:

- The purchase by Alticor of \$7,000,000 of equity in the form of 5 million shares of Series A Preferred Stock for \$1.40 per share. These were convertible into 28,157,683 shares of common stock at a stated conversion price equal to \$0.2486 per share. On March 11, 2004, upon achievement of a defined milestone, Alticor contributed an additional \$2,000,000 to the Company for a total equity funding of \$9,000,000 and a new stated conversion price of \$0.3196 per share, or 28,160,200 shares of common stock.
- The right of the Series A holders to nominate and elect four directors to a five person board.
- A research and development agreement (Research Agreement I) providing the Company with funding of \$5.0 million, payable over the twenty-four month period from April 2003 through March 2005, to conduct certain research projects with a royalty on resulting products.
- Credit facilities in favor of the Company, as follows:
  - \$1,500,000 working capital credit line to initiate selected research agreements with third party entities approved by the board of directors of the Company;
  - \$2,000,000 refinancing of notes previously held by Alticor, extending the maturity date and reducing the interest rate; and
  - \$595,336 refinancing on July 1, 2003 of bridge financing notes previously held by third parties, extending the maturity date and reducing the interest rate.

As of December 31, 2005, there was \$2,595,336 outstanding under the terms of these credit facilities (see Note 8).

On June 17, 2004, the Company entered into another research agreement (Research Agreement II), valued at \$2.2 million, as amended, with Alticor to conduct research into the development of a test to identify individuals with specific genetic variations that affect how people gain and maintain weight. During the first phase of the agreement, the Company received \$1,380,000 in research funding over a period of six months beginning on July 1, 2004. If Alticor determines, in its sole discretion, that it has a reasonable likelihood of commercializing weight management nutritional products, the Company will be eligible to receive, during the second phase of the agreement, an additional \$820,000 in funding over a six-month period. No funding related to this agreement was received during the year ended December 31, 2005.

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On March 5, 2005, the Company entered into an agreement with Alticor to expand the research being performed under Research Agreement I (Research Agreement III) to provide additional funding of \$2,716,151 over the two years beginning April 1, 2005. Also on March 5, 2005, the Company entered into an additional research agreement (Research Agreement IV) with Alticor for exploratory research valued at \$2,341,500 over a two-year period commencing April 1, 2005. These research agreements are expected to provide the Company with a total of \$5.0 million during the two years ending March 2007. The Company received \$2,517,474 in funding related to these agreements during the year ended December 31, 2005.

Also on April 18, 2005, Alticor paid the Company \$2.0 million as a non-refundable advance payment for genetic risk assessment tests to be processed under the terms of the Distribution Agreement. As of December 31, 2005, no tests have been processed under the Distribution Agreement and the \$2.0 million is included in deferred receipt on the accompanying balance sheet. The Distribution Agreement is due to expire on March 22, 2006. On February 23, 2006, Alticor and the Company entered into a Purchase Agreement where both parties have agreed that \$600,000 of the prepayment would be applied to purchases made under the Purchase Agreement from March 23, 2006 through December 31, 2006 to the extent tests are processed. The remaining \$1.4 million prepayment will be recognized as revenue to the extent tests are processed during the remaining term of the Distribution Agreement. As of February 28, 2006, tests valued at \$20,930 have been processed under the terms of the Distribution Agreement.

### Note 4 Accounts Receivable

The changes in the allowance for doubtful accounts consisted of the following:

|   | Year Ended December 31, |      |           |
|---|-------------------------|------|-----------|
|   | 2005                    | 2004 | 2003      |
| Beginning of year                       | \$                      | \$   | \$ 18,000 |
| Provision charged to expense            |                         |      |           |
| Accounts written off, net of recoveries |                         |      | (18,000 ) |
| End of year                             | \$                      | \$   | \$        |

### Note 5 Fixed Assets

The fixed assets useful lives and balances at December 31, 2005 and 2004 consisted of the following:

|  | Useful Life  | 2005              | 2004                |
|--|--------------|-------------------|---------------------|
| Computer software, computer equipment and office equipment | 3 years      | \$ 127,151        | \$ 105,819          |
| R&D lab equipment  | 5 years      | 375,351           | 373,429             |
| Genetic testing lab and equipment                          | 5 years      | 758,964           | 664,162             |
| Furniture and fixtures                                     | 5 years      | 37,087            | 37,087              |
| Leasehold improvements                                     | 5 years      | 261,123           | 261,123             |
| Equipment under capital leases                             | 3 to 5 years | 63,390            | 63,390              |
|  |              | 1,623,066         | 1,505,010           |
| Less Accumulated depreciation and amortization             |              | 666,238           | 362,923             |
| <b>Total</b>   |              | <b>\$ 956,828</b> | <b>\$ 1,142,087</b> |

### Note 6 Equity Interest in York Pharma (formerly Molecular SkinCare Limited)

In October 2003, the Company acquired 12,014 ordinary shares (representing approximately 5% of the outstanding equity) of Molecular SkinCare Limited, a start-up biotechnology company located in Sheffield, England. The transaction was in exchange for granting rights to Molecular SkinCare and Asterion Limited, a company also located in Sheffield, England, in certain intellectual property licensed to

the company. Management determined that the fair value of the shares received was not determinable within reasonable limits because Molecular SkinCare Limited is a private entity and there was major uncertainty about the realizability of the value that would be assigned to this asset received in a non-monetary transaction and, therefore, assigned a nominal value of \$1 to the shares. On February 1, 2005, York Pharma acquired all of the outstanding shares of Molecular SkinCare and issued its ordinary shares to the shareholders of Molecular SkinCare as consideration. As a result, the Company received 39,647 ordinary shares of York Pharma. The Company continues to account for its investment in York Pharma at the lower of cost or market.

#### Note 7 Accrued Expenses

Accrued expenses consist of the following:

|                      | December 31, |            |
|----------------------|--------------|------------|
|                      | 2005         | 2004       |
| Legal                | \$           | \$ 50,000  |
| Payroll and vacation | 97,747       | 96,040     |
| Bonuses              |              | 87,500     |
| Research             | 250,278      | 580,975    |
| Other                | 172,487      | 100,392    |
| Total                | \$ 520,512   | \$ 914,907 |

#### Note 8 Debt

On August 9, 2002, the Company received approximately \$475,000 in net proceeds from the sale of term promissory notes with an original aggregate principal amount of \$525,000. These notes paid interest at a rate of 15% and had an original maturity of August 9, 2003. The purchasers of the promissory notes received warrants to purchase one share of the Company's common stock at a purchase price of \$2.50 for every dollar invested in the promissory notes. In total, warrants to purchase 525,000 shares of common stock were issued. These warrants are immediately exercisable and expire ten years from the date of issuance. As of December 31, 2005, none of these warrants had been exercised. Amortization expense related to the discount of notes was approximately \$210,000 for the year ended December 31, 2003. These notes and \$70,336 in accrued interest were repaid on July 1, 2003 using proceeds provided by Alticor under terms of a credit facility with Alticor (see Note 3).

On October 23, 2002, the Company entered into an interim financing agreement with Alticor that provided debt financing of \$2.0 million. The financing was in the form of four \$500,000 promissory notes, which closed on October 23, 2002, November 15, 2002, December 16, 2002 and January 30, 2003. These notes had an original maturity date of December 31, 2003 and accrued interest at a rate of 15%. The outstanding principal amount and all accrued interest were to be paid upon maturity. These notes are collateralized by all of the Company's intellectual property except intellectual property relating to periodontal disease and sepsis. These notes were amended as part of the strategic alliance with Alticor Inc. (See below).

On March 5, 2003 as part of its strategic alliance with Alticor Inc., the Company was granted credit facilities as follows:

- \$1,500,000 working capital credit line to initiate selected research agreements with third party entities approved by the board of directors of the Company;
- \$2,000,000 refinancing of notes previously held by Alticor, extending the maturity date and reducing the interest rate; and

- \$595,336 refinancing on July 1, 2003 of bridge financing notes previously held by third parties, extending the maturity date and reducing the interest rate.

As of December 31, 2005 and 2004 there was \$2,595,336 outstanding under the terms of these credit facilities, net of unamortized discount of \$923,748 and \$1,385,623 at December 31, 2005 and 2004, respectively. The credit facilities will mature in December 2007, bear interest at 1% over the prime rate (8.25% at December 31, 2005), are collateralized by a security interest in the Company's intellectual property (except intellectual property related to periodontal disease and sepsis), and are convertible at the election of Alticor into 4,060,288 shares of common stock, as adjusted, at a stated conversion price equal to \$0.6392 per share. At December 31, 2005, \$1,500,000 is available through March 2007 under the working capital credit line to initiate selected research agreements with third party entities approved by the board of directors of the Company.

On February 23, 2006, these credit facilities with Alticor were amended to provide the Company with access to an additional \$2.0 million of working capital borrowing at any time prior to April 1, 2007. Any amounts borrowed will bear interest at prime plus 1%, require quarterly interest payments and be due five years from the date of borrowing issuance. In addition, the restrictions on the existing \$1.5 million line of credit were removed so that it can be used for general working capital purposes.

#### Note 9 Commitments and Contingencies

The Company leases its office and laboratory space under a non-cancelable operating lease expiring March 2009. The Company also leases certain office equipment under lease obligations. Future minimum lease commitments under lease agreements with initial or remaining terms of one year or more at December 31, 2005, are as follows:

| Year Ending December 31,          | Operating Leases | Capital Leases |
|-----------------------------------|------------------|----------------|
| 2006                              | 444,504          | 3,017          |
| 2007                              | 444,237          |                |
| 2008                              | 437,004          |                |
| 2009                              | 109,251          |                |
| 2010                              |                  |                |
|                                   | \$ 1,434,996     | 3,017          |
| Less Amount representing interest |                  | 40             |
| Less Current portion              |                  | 2,977          |
| Long-term portion                 |                  | \$             |

Rent expense was \$434,677, \$389,351 and \$272,112 for the years ended December 31, 2005, 2004 and 2003, respectively.

#### Acquisition of Data Bases

In connection with the research agreement with Alticor dated March 5, 2003, the Company is obligated to purchase two clinical databases. As of June 30, 2004, the Company determined that this obligation met the criteria of SFAS No. 5, *Accounting for Contingencies*, and estimated the cost of these two databases at \$450,000. Accordingly, the Company recorded a liability and charged research and development expenses of \$450,000 at that time. As of December 31, 2005, the Company had expenditures of \$131,981 associated with the acquisition of these databases. The Company believes that the acquisition of the databases will not exceed the amount that the Company has estimated, however actual amounts could differ.

*Sponsored Research Agreements*

In connection with the research agreement with Alticor dated June 17, 2004, the Company entered into a sponsored research agreement with Tufts University to conduct a clinical study. The sponsored research agreement is for an amount of \$684,149, as amended, and is payable upon achievement of certain milestones. As of December 31, 2005, Tufts University had achieved milestone payments valued at \$511,179. The remaining commitment on this agreement is \$172,970. As, and if, Tufts University completes the other milestones associated with this sponsored research agreement, the Company will record these costs as research and development expenses.

*Employment Agreements*

The Company has entered into employment agreements with certain key employees of the Company. These agreements expire March 5, 2006. As of December 31, 2005, the remaining commitment under these agreements was approximately \$125,000.

**Note 10 Capital Stock**

*Authorized Common and Preferred Stock*

At December 31, 2005, the Company had authorized 6,000,000 shares of \$0.001 par value Preferred Stock, of which 5,000,000 shares are designated as Series A Preferred Stock all of which were issued and outstanding. At December 31, 2005, the Company had authorized 75,000,000 shares of \$0.001 par value common stock of which 61,900,825 shares were outstanding or reserved for issuance as follows: 23,927,326 shares were outstanding; 28,160,200 shares were reserved for the conversion of the Series A Preferred to common stock; 4,060,288 shares were reserved for the conversion of approximately \$2.6 million of debt; 4,777,304 shares were reserved for the exercise of authorized or outstanding stock options; 525,000 shares were reserved for the exercise of outstanding warrants to purchase common stock; and 450,707 shares were reserved for the exercise of rights held under the Employee Stock Purchase Plan.

*Series A Preferred Stock*

On March 5, 2003, the Company entered into a Stock Purchase Agreement with Alticor, pursuant to which Alticor purchased from the Company 5,000,000 shares of Series A Preferred Stock for \$7,000,000 in cash on that date, and an additional \$2,000,000 in cash that was paid, as a result of the Company achieving a certain milestone, on March 11, 2004.

The Series A Preferred Stock are entitled to receive dividends at the rate of 8% of the original purchase price per year, payable only when, as and if declared by the Board of Directors and are non-cumulative. To date, no dividends have been declared on these shares. If the Company declares a distribution, with certain exceptions, payable in securities of other persons, evidences of indebtedness issued by us or other persons, assets (excluding cash dividends) or options or rights to purchase any such securities or evidences of indebtedness, then, in each such case the holders of the Series A Preferred Stock are entitled to a proportionate share of any such distribution as though the holders of the Series A Preferred Stock were the holders of the number of shares of the Company's Common Stock into which their respective shares of Series A Preferred Stock are convertible as of the record date fixed for the determination of the holders of its Common Stock entitled to receive such distribution.

In the event of any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the holders of the Series A Preferred Stock are entitled to receive, prior and in preference to any distribution of any of the Company's assets or surplus funds to the holders of its Common Stock by reason of their ownership thereof, the amount of two times the then-effective purchase price per share, as adjusted for any stock dividends, combinations or splits with respect to such shares, plus all declared but unpaid dividends on such share for each share of Series A Preferred Stock then held by them. The

liquidation preference at December 31, 2005 was \$18,000,000. After receiving this amount, the holders of the Series A Preferred Stock shall participate on an as-converted basis with the holders of common stock in any of the remaining assets.

Each share of Series A Preferred Stock is convertible at any time at the option of the holder into a number of shares of the Company's common stock determined by dividing the then-effective purchase price (\$1.80, and subject to further adjustment) by the conversion price in effect on the date the certificate is surrendered for conversion. As of December 31, 2005, the Series A Preferred Stock is convertible into 28,160,200 shares of Common Stock reflecting a current conversion price of \$.3196 per share.

Each holder of Series A Preferred Stock is entitled to vote its shares of Series A Preferred Stock on an as-converted basis with the holders of Common Stock as a single class on all matters submitted to a vote of the stockholders, except as otherwise required by applicable law. This means that each share of Series A Preferred Stock will be entitled to a number of votes equal to the number of shares of Common Stock into which it is convertible on the applicable record date.

#### *Employee Stock Purchase Plan*

Effective October 14, 1998, the Company's Board of Directors approved an Employee Stock Purchase Plan for qualified employees of the Company. Under the terms of the Employee Stock Purchase Plan, an employee may purchase up to \$25,000 per calendar year of the Company's stock at a price equal to 85% of the fair market value of the stock (as quoted on the company's listing exchange) on either the first or last day of a calendar quarter. The Company had initially reserved 500,000 shares of common stock for purchases to be made under the Employee Stock Purchase Plan. During the years ended December 31, 2005, 2004 and 2003, 12,647, 10,998 and 8,408 shares, respectively, were purchased under the Employee Stock Purchase Plan at an average purchase price of approximately \$2.81, \$2.99 and \$1.43 per share, respectively.

#### **Note 11 Stock Option Plans**

In June 1996, the Company's shareholders approved the adoption of the 1996 Equity Incentive Plan (the 1996 Plan). The 1996 Plan provides for the award of nonqualified and incentive stock options, restricted stock and stock bonuses to employees, directors, officers and consultants of the Company. A total of 1,300,000 shares of the Company's common stock have been reserved for award under the 1996 Plan of which 294,714 remained unissued at December 31, 2005. This plan no longer complies with the current Securities Exchange Act and, consequently, was terminated with respect to new grants.

In June 2000, the Company's shareholders approved the adoption of the Interleukin Genetics, Inc. 2000 Employee Stock Compensation Plan (the 2000 Plan). The 2000 Plan provides for the award of nonqualified and incentive stock options, restricted stock, and stock awards to employees, directors, officers, and consultants of the Company. A total of 2,000,000 shares of the Company's common stock have been reserved for award under the 2000 Plan of which 327,032 were available for future issuance at December 31, 2005.

In June 2004, the Company's shareholders approved the adoption of the Interleukin Genetics, Inc. 2004 Employee Stock Compensation Plan (the 2004 Plan). The 2004 Plan provides for the award of nonqualified and incentive stock options, restricted stock, and stock awards to employees, directors, officers, and consultants of the Company. A total of 2,000,000 shares of the Company's common stock have been reserved for award under the 2004 Plan of which 1,677,743 were available for future issuance at December 31, 2005.

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Nonqualified and incentive stock options with a life of 10 years are generally granted at exercise prices equal to the fair market value of the common stock on the date of grant. Options generally vest over a period of three to five years.

A summary of the status of the Company's stock options, issued under the 1996, 2000 and 2004 Plans and outside of these plans, at December 31, 2005, 2004 and 2003, and changes during these years is presented in the tables below:

The following table details all stock option activity:

|                                | 2005       |                             | 2004       |                             | 2003       |                             |
|--------------------------------|------------|-----------------------------|------------|-----------------------------|------------|-----------------------------|
|                                | Shares     | Weighted Avg Exercise Price | Shares     | Weighted Avg Exercise Price | Shares     | Weighted Avg Exercise Price |
| Outstanding, beginning of year | 2,985,474  | \$ 2.81                     | 3,180,133  | \$ 2.65                     | 2,873,652  | \$ 2.29                     |
| Granted                        | 291,500    | 3.25                        | 342,707    | 3.97                        | 852,000    | 3.70                        |
| Exercised                      | (320,342 ) | 1.80                        | (320,751 ) | 2.10                        | (135,931 ) | 1.06                        |
| Canceled                       | (418,817 ) | 4.30                        | (216,615 ) | 3.47                        | (409,588 ) | 2.95                        |
| Expired                        | (60,000 )  | 4.47                        |            |                             |            |                             |
| Outstanding, end of year       | 2,477,815  | \$ 2.69                     | 2,985,474  | \$ 2.81                     | 3,180,133  | \$ 2.65                     |
| Exercisable, end of year       | 1,895,815  | \$ 2.36                     | 2,343,465  | \$ 2.44                     | 2,220,971  | \$ 2.28                     |

These totals include 70,000 nonqualified stock options issued to non-employees in 2003 for which expenses of \$111,580 were recorded during that year. No stock options were issued to non-employees in 2005 and 2004.

The following table details further information regarding stock options outstanding and exercisable at December 31, 2005:

| Range of Exercise Price: | Stock Options Outstanding |   |                             | Stock Options Exercisable |                             |                             |
|--------------------------|---------------------------|---|-----------------------------|---------------------------|-----------------------------|-----------------------------|
|                          | Shares                    | Weighted Avg remaining contractual life (years) | Weighted Avg Exercise Price | Shares                    | Weighted Avg Exercise Price | Weighted Avg Exercise Price |
| \$0.50 - \$0.99          | 325,777                   | 3.88  | \$ 0.62                     | 321,777                   | \$ 0.62                     | \$ 0.62                     |
| \$1.00 - \$1.49          | 316,000                   | 5.14  | 1.22                        | 316,000                   | 1.22                        | 1.22                        |
| \$1.50 - \$1.99          | 111,356                   | 4.68  | 1.72                        | 111,356                   | 1.72                        | 1.72                        |
| \$2.00 - \$2.49          | 50,000                    | 5.13  | 2.23                        | 22,500                    | 2.11                        | 2.11                        |
| \$2.50 - \$2.99          | 772,275                   | 3.26  | 2.80                        | 772,275                   | 2.80                        | 2.80                        |
| \$3.00 - \$3.49          | 229,000                   | 9.53  | 3.05                        | 20,000                    | 3.00                        | 3.00                        |
| \$3.50 - \$3.99          | 154,007                   | 8.87  | 3.65                        | 109,257                   | 3.64                        | 3.64                        |
| \$4.00 - \$4.49          | 149,400                   | 8.70  | 4.15                        | 37,150                    | 4.17                        | 4.17                        |
| \$4.50 - \$4.75          | 370,000                   | 7.95  | 4.70                        | 185,500                   | 4.70                        | 4.70                        |
|                          | 2,477,815                 | 5.64  | \$ 2.69                     | 1,895,815                 | \$ 2.36                     | \$ 2.36                     |

### Note 12 Employee Benefit Plan

In 1998, the Company adopted a profit sharing plan covering substantially all of its employees. Under the profit sharing plan, the Company may, at the discretion of the Board of Directors, contribute a portion of the Company's current or accumulated earnings. In September 1998, the Company amended and restated the profit sharing plan to include provisions for Section 401(k) of the Internal Revenue Code, which allowed for pre-tax employee contributions to the plan. Under the amended and restated plan, the Company may, at the discretion of the Board of Directors, match a portion of the participant

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contributions. The Company currently contributes 15% of any amount employees contribute, up to a maximum of \$1,000 per participant per calendar year. Company contributions, if any, are credited to the participants' accounts and vest over a period of four years based on the participants' initial service date with the Company. During the years ended December 31, 2005, 2004 and 2003, \$10,884, \$40,289 and \$936 was contributed to the plan, respectively.

### Note 13 Income Taxes

The Company accounts for income taxes in accordance with SFAS No. 109, *Accounting for Income Taxes*, which requires the recognition of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in the financial statements or tax returns. The measurement of current and deferred tax liabilities and assets is based on provisions of the enacted tax law; the effects of future changes in tax laws or rates are not anticipated.

For the years ended December 31, 2005 and 2004, there is no provision for income taxes included in the Consolidated Statement of Operations. The Company's federal statutory income tax rate for 2005 and 2004 was 34%, respectively. The Company used a blended federal and state income tax rate of 40% for 2005. The Company has incurred losses from operations but has not recorded an income tax benefit for 2005 or 2004, as the Company has recorded a valuation allowance against its net operating losses and other net deferred tax assets due to uncertainties related to the realizability of these tax assets.

Deferred tax liabilities and assets are determined based on the difference between financial statement and tax bases using enacted federal and state tax rates in effect for the year in which the differences are expected to reverse. As of December 31, 2005 and 2004, the approximate income tax effect of the Company's deferred tax assets (liabilities) consisted of the following:

|   | 2005          | 2004          |
|---|---------------|---------------|
| Net operating loss carryforwards                                    | \$ 16,070,000 | \$ 13,500,000 |
| Research tax credit carryforwards                                   | 1,087,000     | 761,000       |
| Accrual to cash adjustments   | 1,139,000     | 795,000       |
| Disqualifying dispositions and non-qualified stock option exercises | 210,000       | 274,000       |
| Charitable contributions carryforward                               | 2,000         | 2,000         |
| Depreciation  | 3,000         | 3,000         |
| Patents   | (155,000)     | (96,000)      |
| Total deferred tax assets   | 18,356,000    | 15,239,000    |
| Valuation allowance   | (18,356,000)  | (15,239,000)  |
| Net deferred tax assets   | \$            | \$            |

A portion of the funds received from Alticor and its subsidiaries for research and other agreements are reflected as equity in the financial statements but are reported as revenue for tax purposes and included in the calculation of the net operating loss carryforward for the years ended December 31, 2005 and 2004 in the amounts of \$2,713,474 and \$3,609,429, respectively.

As of December 31, 2005, the Company had gross net operating loss (NOL) and research tax credit carryforwards of approximately \$43,000,000 and \$870,000, respectively, for federal income tax purposes, expiring in varying amounts through the year 2025. As of December 31, 2005, the Company had gross NOL and research tax credits carryforwards of approximately \$20,000,000 and \$330,000 for state income tax purposes, expiring in varying amounts through the year 2010. The Company's ability to use its NOL and tax credit carryforwards to reduce future taxes is subject to the restrictions provided by Section 382 of the Internal Revenue Code of 1986. These restrictions provide for limitations on the Company's utilization of its NOL and tax credit carryforwards following a greater than 50% ownership change during the prescribed



testing period. On March 5, 2003, the Company has had such a change. As a result, all of the Company's NOL carryforwards are limited in utilization. The annual limitation may result in the expiration of certain of the carryforwards prior to utilization.

#### Note 14 Segment Information

The Company follows SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information* (SFAS No. 131) which establishes standards for reporting information about operating segments in annual and interim financial statements, and requires that companies report financial and descriptive information about its reportable segments based on a management approach. SFAS No. 131 also establishes standards for related disclosures about products and services, geographic areas and major customers. In applying the requirements of this statement, each of the Company's geographic areas described below was determined to be an operating segment as defined, but have been aggregated for reporting purposes. As a result, the Company continues to have one reportable segment, which is the development of genetic risk assessment tests and therapeutic targets for common diseases.

The Company has no operations outside of the United States. During 2005, 2004 and 2003, the Company had minimal royalty income derived from distributors outside the United States, minimal expenses derived from research partners outside the United States and minimal assets outside of the United States. The Company does not believe this risk is material and does not use derivative financial instruments to manage foreign currency fluctuation risk.

#### Note 15 Selected Quarterly Financial Data (Unaudited)

The following are selected quarterly financial data for the years ended December 31, 2005 and 2004.

|   | Quarter Ended     |                  |                       |                      |
|---|-------------------|------------------|-----------------------|----------------------|
|   | March 31,<br>2005 | June 30,<br>2005 | September 30,<br>2005 | December 31,<br>2005 |
| Revenue                                     | \$ 7,359          | \$ 7,694         | \$ 5,690              | \$ 2,134             |
| Gross profit                                | \$ 7,359          | \$ 7,694         | \$ 5,690              | \$ 2,134             |
| Loss from operations                        | \$ (1,380,583 )   | \$ (1,664,868 )  | \$ (1,382,939 )       | \$ (1,629,598 )      |
| Net loss                                    | \$ (1,514,964 )   | \$ (1,793,791 )  | \$ (1,507,521 )       | \$ (1,754,548 )      |
| Basic and diluted net loss per common share | \$ (0.06 )        | \$ (0.08 )       | \$ (0.06 )            | \$ (0.07 )           |

|   | Quarter Ended     |                  |                       |                      |
|---|-------------------|------------------|-----------------------|----------------------|
|   | March 31,<br>2004 | June 30,<br>2004 | September 30,<br>2004 | December 31,<br>2004 |
| Revenue                                     | \$ 8,343          | \$ 9,977         | \$ 8,216              | \$ 8,135             |
| Gross profit                                | \$ 8,288          | \$ 9,934         | \$ 7,965              | \$ 8,134             |
| Loss from operations                        | \$ (1,541,425 )   | \$ (2,004,794 )  | \$ (1,594,254 )       | \$ (1,561,560 )      |
| Net loss                                    | \$ (1,681,031 )   | \$ (2,140,005 )  | \$ (1,729,836 )       | \$ (1,695,330 )      |
| Basic and diluted net loss per common share | \$ (0.07 )        | \$ (0.09 )       | \$ (0.07 )            | \$ (0.07 )           |

#### Note 16 Subsequent Events

On February 23, 2006, the Company entered into two new Purchase Agreements with Alticor Inc. The two new Purchase Agreements cover two genetic health assessment tests that Interleukin Genetics developed on behalf of Alticor. These are: 1) the Gensona Heart Health Genetic Test, which analyzes DNA variations in the Interleukin-1A and 1B genes to identify whether an individual may have a predisposition for chronically elevated measures of inflammation and an increased risk for heart disease; and 2) the Gensona General Nutrition Genetic Test, which analyzes DNA variations in two genes that affect Vitamin B metabolism and four genes that are involved in responding to oxidative stress. These tests will be provided exclusively through Quixtar, a subsidiary of Alticor. The Gensona Heart Health Genetic

Test Purchase Agreement is a continuation of the Distribution Agreement, which will expire on March 22, 2006, through March 2008. The terms of the agreement provide that \$0.6 million of the \$2.0 million prepayment under the Distribution Agreement will be applied to purchases made under this agreement. The Genoson General Nutrition Genetic Test Purchase Agreement term is through January 2008.

Also on February 23, 2006, the credit facilities with Alticor were amended to provide the Company with access to an additional \$2.0 million of working capital borrowing at any time prior to April 1, 2007. Any amounts borrowed will bear interest at prime plus 1%, require quarterly interest payments and will be due five years from the date of borrowing. In addition, the restrictions on the existing \$1.5 million line of credit were removed so that it can be used for general working capital purposes.

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