INTERLEUKIN GENETICS INC Form S-3/A December 05, 2006

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As filed with the Securities and Exchange Commission December 5, 2006

Registration No. 333-138862

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Amendment No.1 to FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

INTERLEUKIN GENETICS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

94-3123681

(I.R.S. Employer Identification Number)

135 Beaver Street Waltham, Massachusetts 02452 (781) 398-0700

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Timothy J. Richerson Chief Executive Officer Interleukin Genetics, Inc. 135 Beaver Street Waltham, Massachusetts 02452 Telephone: (781) 398-0700

(Name, address, including zip code, and telephone number, including area code, of agent for service)

with copies to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. ý

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to Section 8(a), may determine.

This Registration Statement contains a prospectus relating to the offering by Interleukin Genetics, Inc. of its common stock issuable upon the exercise of subscription rights.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 5, 2006

PRELIMINARY PROSPECTUS

INTERLEUKIN GENETICS, INC.

2,533,234 SHARES OF COMMON STOCK

We are offering to our stockholders up to an aggregate of 2,533,234 shares of our common stock. For every share held at the close of business on August 17, 2006, the record date for the distribution, you will receive approximately 0.1041 subscription rights to purchase shares of our common stock.

Each whole right entitles the holder to a basic subscription privilege and an oversubscription privilege. Under the basic subscription privilege, you may purchase one share of our common stock at a subscription price of \$5.6783 per share. Under the oversubscription privilege, upon the exercise of the basic subscription privilege in full, you will be entitled to subscribe, at the same subscription price, for shares of common stock which are not purchased by other rightsholders under their basic subscription privilege. The subscription price per share is the same price at which Pyxis Innovations Inc. purchased shares of our common stock under the terms of the Stock Purchase Agreement dated as of August 17, 2006, as described herein. All exercises of rights are irrevocable.

The subscription price for shares may only be paid in cash. Assuming that rights for all of the shares offered hereby are exercised, we will receive \$14.4 million from the rights offering, before paying estimated expenses of \$200,000, resulting in net proceeds of approximately \$14.2 million.

The subscription rights are exercisable beginning on December , 2006 and continuing until 5:00 p.m., Eastern Standard Time, on January , 2007, unless we decide to extend the rights offering. NO EXERCISES OF RIGHTS WILL BE ACCEPTED FOLLOWING THE EXPIRATION TIME.

The rights will not be transferable. No trading market exists for the rights as of the date of this prospectus and the rights will not be listed for trading on any stock exchange.

Our common stock is listed under the symbol "ILI" on the American Stock Exchange (AMEX) and "ILG" on the Boston Stock Exchange. On October 31, 2006, the closing sale price of our common stock was \$6.55 per share.

Our executive offices are located at 135 Beaver Street, Waltham, Massachusetts 02452. Our telephone number is (781) 398-0700.

INVESTING IN OUR COMMON STOCK INVOLVES RISKS.

SEE "RISK FACTORS" BEGINNING ON PAGE 10.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

This rights offering is not being made to, nor will we accept subscriptions for common stock from, any person, in any jurisdiction in which the rights offering or the acceptance of such offering would not be in compliance with the securities or "blue sky" laws of such jurisdiction.

The date of this prospectus is December , 2006.

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ABOUT THIS PROSPECTUS

This summary highlights selected information from this prospectus. We urge you to read this entire prospectus carefully. It may not contain all of the information which is important to you. To understand this rights offering fully and for a more complete description of the legal terms of this offering, we encourage you to carefully read the entire prospectus and the other documents to which we may refer you as described under the caption "Where You Can Find More Information" on the inside back cover of this prospectus.

OUR BUSINESS

Overview

We are a biotechnology company in the business of personalized health. We were founded on the premise that as people age they will seek information that could improve their longevity and quality of life. Medical practitioners are also increasingly looking to science for new knowledge about disease, and the role of genetics play in determining which individuals might be more susceptible to any given medical condition. Interleukin is focused on developing, acquiring, and commercializing personalized health products. We use functional genomics to help in the development of risk assessment tests, pharmacogenetic tests, nutritional and therapeutic products based on the genetic variations in people. Interleukin has commercialized genetic tests for periodontal disease risk assessment, cardiovascular risk assessment, and general nutrition assessment. In addition, through our Alan James Group subsidiary which we acquired in August 2006, we sell our nutraceutical brands, including Ginkoba®, Ginsana®, and Venastat through the nation's largest food, drug and mass retailers. Our current development programs focus on osteoporosis and weight management genetic risk assessment tests, as well as our new proprietary OTCeutical® products for distribution or licensing through Alan James Group. We expect that these programs will also lead to the personalized selection of nutritional and therapeutic products, and provide consumers and healthcare professionals with better preventative product alternatives.

Primary Business Endeavors

We are currently focused on developing our business by developing our proprietary technology around the role that genetically determined variations in the inflammatory response has on health and disease into personal health offerings to consumers and patients globally. 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) products for those individuals at risk; and

therapeutic products that are personalized based upon an individual's genetic makeup.

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 variation in key inflammation genes to risk for disease. Since the IL-1 and TNFa 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 TNFa 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 TNFa. 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 TNFa were at critical biological leverage points, and we initiated research programs to determine if variations in expression of IL-1 and TNFa 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.

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. The information contained on our website is not part of this prospectus. 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.

QUESTIONS AND ANSWERS ABOUT THIS OFFERING

Why are we conducting the rights offering?

We want to provide our stockholders with the opportunity to invest in our common stock at the same price per share as that paid by Pyxis Innovations Inc. on August 17, 2006.

What is a rights offering?

A rights offering is a distribution of subscription rights on a pro rata basis to all stockholders of a company. For every share held at the close of business on August 17, 2006, the record date for the distribution, each of our stockholders will receive approximately 0.1041 subscription rights to purchase shares of our common stock. Pyxis Innovations has agreed to waive its right to participate in this offering.

What is a right?

Each whole right entitles its holder to purchase one share of our common stock at the subscription price of \$5.6783 per share. Each right carries with it a basic subscription privilege and an oversubscription privilege.

What is the basic subscription privilege?

The basic subscription privilege entitles each holder of a whole right to purchase one share of our common stock for the subscription price.

What is the oversubscription privilege?

The oversubscription privilege entitles each holder of a whole right, if the holder fully exercises the basic subscription privilege, to subscribe at the subscription price for a number of shares of our common stock that are offered in the rights offering but are not purchased by the other rightsholders under their basic subscription privilege.

What are the limitations on the oversubscription privilege?

We will be able to satisfy exercises of the oversubscription privilege of the rights only if holders of basic subscription rights subscribe for less than all of the shares of our common stock that may be purchased under the basic subscription privilege of those rights. If sufficient shares are available, we will honor the oversubscription requests in full. If oversubscription requests exceed the shares available, we will allocate the available shares pro rata among those who oversubscribed based on each rightsholder's percentage ownership of shares of our common stock as of the record date compared to the total ownership of all rightsholders participating in the oversubscription round or, if less, the number of shares for which you oversubscribe.

Will I receive fractional rights?

We will not issue fractional rights. Instead, we will round any fractional rights to the nearest whole right. For example, if you own 200 shares of common stock, you will receive 21 rights instead of the 20.8186 rights you would have received without rounding and if you own 100 shares of common stock, you will receive 10 rights instead of the 10.4093 rights you would have received without rounding.

What if all shareholders other than Pyxis exercise their full subscription privilege?

In that case, rights to purchase approximately 2,533,234 shares would have been subscribed. This offering is capped at 2,533,234 shares. Subscriptions granted would be adjusted on a pro rata basis so that the total number of shares issued and funds raised do not exceed 2,533,234 and \$14.4 million in gross proceeds, respectively. For example, if you own 200 shares and subscribed to receive 30 shares of common stock, and all other shareholders other than Pyxis subscribed for the full amount of rights per their shareholding as of the record date, your subscription would be adjusted on a pro rata basis to 21 rights or 0.105 subscription rights per share of common stock. In this case we would refund promptly to the shareholder the value of 9 shares, which, at \$5.6783 per share, is \$51.11, representing the pro rata portion of the rights that exceeded the share cap.

When will the rights offering expire?

The rights offering will expire at 5:00 p.m., Eastern Standard Time, on January , 2007, unless we extend it. We may extend or waive the expiration time for any reason.

Am I required to subscribe in the rights offering?

No. However, if you choose not to exercise your rights, you will experience dilution to your percentage ownership in our company.

If I exercise my rights, may I cancel or change my decision?

No. All exercises of rights are irrevocable even if we extend the subscription period. We may extend the expiration time for any reason.

May I transfer my rights if I do not want to purchase any shares?

No. The rights are not transferable.

Are there any conditions to the consummation of the rights offering?

No.

Can we terminate the rights offering?

Yes. We may terminate the rights offering for any reason before the expiration time.

If we terminate the rights offering, will your subscription payment be refunded?

Yes. If we terminate the rights offering, the subscription agent will return all subscription payments promptly. We will not pay interest on, or deduct any amounts from, subscription payments if we terminate the rights offering.

How will we use the proceeds received from the rights offering?

Assuming that rights for all of the shares offered hereby are exercised, we will receive \$14.4 million, before deducting any offering expenses. These expenses are estimated to be \$200,000. We will use any net proceeds we receive from the rights offering for general corporate purposes.

How are we making the rights offering?

This rights offering is being made directly by us. We will not pay any underwriting discounts or commissions, finders fees or other remuneration in connection with any distribution of the rights offered by this prospectus, other than the fees paid to the subscription agent.

How did we arrive at the offering price and what is the current trading price of our common stock?

Under the terms of our Stock Purchase Agreement with Pyxis Innovations Inc., dated as of August 17, 2006, we issued 2,750,037 shares of our common stock for an aggregate purchase price of \$15,615,537, or \$5.6783 per share. The rights distributed in this offering allow our stockholders to buy our common stock at the same price, \$5.6783 per share, as Pyxis Innovations paid for shares of our common stock. On October 31, 2006, the last reported price for our common stock on AMEX was \$6.55 per share. We cannot predict the trading price of our common stock at the time of closing this rights offering. Accordingly, purchasers of shares of common stock in the rights offering may pay a premium, or receive a discount, on the purchase of shares as compared to the closing price of our common stock at the time of the closing of the rights offering.

How many shares of our common stock are currently outstanding?

As of October 31, 2006, we had approximately 27.3 million shares of our common stock outstanding. The number of outstanding shares of our common stock will increase by 2.5 million following the issuance of all shares purchased in the rights offering (assuming that rights for all of the shares offered hereby are exercised), which represents approximately a 9% increase in the number of outstanding shares of our common stock. The share numbers included in this paragraph exclude

outstanding stock options and warrants to purchase shares of our common stock, as well as shares issuable upon conversion of outstanding convertible debt.

How do I exercise my rights?

Each holder who wishes to exercise the basic subscription privilege should properly complete and sign the rights certificate and deliver the rights certificate together with payment of the subscription price for each share of common stock for which such holder is subscribing to the subscription agent before the expiration time. Each holder who further wishes to exercise the oversubscription privilege under its rights must also include payment of the subscription price for each share of common stock subscribed for under the oversubscription privilege. We recommend that any rightsholder who uses the United States mail to effect delivery to the subscription agent use insured, registered mail with return receipt requested. Any holder who cannot deliver its rights certificate to the subscription agent before the expiration time may use the procedures for guaranteed delivery described in this prospectus under the heading "The Rights Offering Guaranteed Delivery Procedures." We will not pay interest on subscription payments. We have provided more detailed instructions on how to exercise the rights in this prospectus under the heading "The Rights Offering" beginning with the section entitled "Exercising Your Rights," in the rights certificates themselves and in the document entitled "Instructions for Use of Interleukin Genetics, Inc. Rights Certificates" that accompanies this prospectus.

How may I pay my subscription price?

Your cash payment of the subscription price must be made by either check or bank draft drawn upon a U.S. bank or postal, telegraphic or express money order payable to the subscription agent.

What should I do if I want to participate in the rights offering but my shares are held in the name of my broker or a custodian bank?

We will ask brokers, dealers and nominees holding shares of our common stock on behalf of other persons to notify these persons of the rights offering. Any beneficial owner wishing to exercise the rights will need to have its broker, dealer or nominee act on its behalf. Each beneficial owner should complete and return to its broker, dealer or nominee the form entitled "Beneficial Owner Election Form." This form will be available with the other subscription materials from brokers, dealers and nominees holding shares of our common stock on behalf of other persons.

Will I receive subscription materials by mail if my address is outside the United States?

No. We will not mail rights certificates to any person with an address outside the United States. Instead, the subscription agent will hold rights certificates for the account of all foreign holders. To exercise those rights, each such holder must notify the subscription agent on or before 5:00 p.m., Eastern Standard Time, on January , 2007 and establish to the satisfaction of the subscription agent that it is permitted to exercise its rights under applicable law.

Will I be charged any fees if I exercise my rights?

We will not charge a fee to holders for exercising their rights. However, any holder exercising its rights through a broker, dealer or nominee will be responsible for any fees charged by its broker, dealer or nominee.

If I exercise my rights, when will I receive the shares for which I have subscribed?

We will issue the shares for which subscriptions have been properly delivered to the subscription agent prior to the expiration time as soon as practicable following the expiration time. We will not be

able to calculate the number of shares to be issued to each exercising rightsholder until the third business day after the expiration time, which is the latest time by which rights certificates may be delivered to the subscription agent under the guaranteed delivery procedures described in this prospectus under the heading "The Rights Offering Exercising Your Rights Guaranteed Delivery Procedures."

Have you or your Board of Directors made a recommendation as to whether I should exercise my rights?

No. Neither we nor our Board of Directors has made any recommendation as to whether you should exercise your rights. You should decide whether to subscribe for shares of our common stock, or simply take no action with respect to your rights, based upon your own assessment of your best interests.

What are the tax consequences of the rights offering to me?

Stockholders who receive rights will not recognize taxable income in connection with the distribution or exercise of the rights. Any holder who sells its shares of common stock that it acquires by exercising its rights may recognize a gain or loss. For a complete summary of the material U.S. federal income tax consequences to holders of our common stock, please see the section entitled "Tax Considerations."

Where should I send my forms and payment?

If you elect to exercise your rights and you are a shareholder of record, you should forward your subscription forms and payment via hand delivery, mail or overnight delivery to:

U.S. Stock Transfer Corporation 1745 Gardena Avenue; Suite 200 Glendale, CA 91204 Attention: Stock Transfer Department Tel: (818) 502-1404

If you are a beneficial owner, forward your subscription forms and payment to your broker, dealer or other nominee.

What should I do if I have other questions?

If you have questions or need assistance, please contact John J. McCabe, our Secretary, at:

Interleukin Genetics, Inc. 135 Beaver Street Waltham, Massachusetts 02452 Tel: (781) 398-0700

For further assistance on how to subscribe for shares, you may also contact U.S. Stock Transfer Corporation, the subscription agent for the rights offering, by mail or telephone at:

U.S. Stock Transfer Corporation 1745 Gardena Avenue; Suite 200 Glendale, CA 91204 Attention: Stock Transfer Department Tel: (818) 502-1404

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RISK FACTORS

The following factors should be considered carefully in evaluating whether to purchase shares of common stock in the rights offering. These factors should be considered in conjunction with any other information included or incorporated by reference herein, including in conjunction with forward-looking statements made herein. See "Where You Can Find More Information" on Page 29.

RISKS RELATED TO OUR BUSINESS

An inability to manage our growth or successfully integrate acquired businesses could adversely affect our business.

Our business is in a period of rapid growth, with total revenues increasing from \$23,000 in 2005 to \$2.9 million in the first nine months of 2006. In August 2006, we made a significant acquisition and may make more in the future. The successful integration of acquired businesses requires a significant effort and expense across all operational areas, including sales and marketing, research and development, manufacturing, finance and administration and information technologies. Our future operating results will depend on the ability of our management to continue to implement and improve our research, product development, manufacturing, sales and marketing and customer support programs, enhance our operational and financial control systems, expand, train and manage our employee base, integrate acquired businesses, and effectively address new issues related to our growth as they arise. There can be no assurance that we will be able to manage our recent or any future expansion or acquisition successfully, and any inability to do so could have a material adverse effect on our results of operations.

Our recent acquisition may not be profitable, and the integration of our businesses may be costly and difficult and may cause disruption to our business.

We have acquired and are in the process of integrating into our operations the business formerly operated by the Alan James Group, LLC. The ultimate success of this acquisition depends, in part, on our ability to realize the anticipated synergies, cost savings and growth opportunities from integrating this business and its assets into our existing businesses. However, the successful integration of independent businesses or assets is a complex, costly and time-consuming process. The difficulties of integrating companies and acquired assets include among others:

consolidating manufacturing and research and development operations, where appropriate;

integrating newly acquired businesses or product lines into a uniform financial reporting system;

coordinating sales, distribution and marketing functions;

establishing or expanding manufacturing, sales, distribution and marketing functions in order to accommodate newly acquired businesses or product lines;

preserving the important licensing, research and development, manufacturing and supply, distribution, marketing, customer and other relationships;

minimizing the diversion of management's attention from ongoing business concerns; and

coordinating geographically separate organizations.

We may not accomplish the integration of this acquisition smoothly or successfully. The diversion of the attention of our management from our current operations to the integration effort and any difficulties encountered in combining operations could prevent us from realizing the full benefits anticipated to result from this acquisition and adversely affect our other businesses. Additionally, the costs associated with the integration of this acquisition may be substantial. To the extent that we incur integration costs that were not anticipated when we financed our acquisition, these unexpected costs could adversely

impact our liquidity or force us to borrow additional funds. Ultimately, the value of any business or asset that we have acquired may not be greater than or equal to its purchase price.

Intangible assets that we have recorded in connection with our acquisition of the Alan James Group business could become impaired, requiring us to take significant charges against earnings.

In connection with the accounting for our acquisition of the Alan James Group business, we have recorded, a significant amount of intangible assets. Under current accounting guidelines, we must assess, at least annually and potentially more frequently, whether the value of goodwill and other intangible assets has been impaired. Any reduction or impairment of the value of goodwill or other intangible assets will result in a charge against earnings which could materially adversely affect our reported results of operations in future periods.

If we deliver products with defects, our credibility may be harmed, market acceptance of our products may decrease and we may be exposed to liability in excess of our product liability insurance coverage.

The manufacturing and marketing of consumer and professional diagnostic products, nutraceuticals and OTCeuticals involve an inherent risk of product liability claims. In addition, our product development and production are extremely complex and could expose our products to defects. Any defects could harm our credibility and decrease market acceptance of our products. In addition, our marketing of nutraceuticals and OTCeuticals may cause us to be subjected to various product liability claims, including, among others, claims that the nutraceuticals and OTCeuticals have inadequate warnings concerning side effects and interactions with other substances. Potential product liability claims may exceed the amount of our insurance coverage or may be excluded from coverage under the terms of the policy. In the event that we are held liable for a claim for which we are not indemnified, or for damages exceeding the limits of our insurance coverage, that claim could materially damage our business and our financial condition.

Our sales of specific nutraceuticals and OTCeuticals could be negatively impacted by media attention or other news developments that challenge the safety and effectiveness of those specific nutraceuticals and OTCeuticals.

Most growth in the nutraceutical and OTCeutical industry is attributed to new products that tend to generate greater attention in the marketplace than do older products. Positive media attention resulting from new scientific studies or announcements can spur rapid growth in individual segments of the market, and also impact individual brands. Conversely, news that challenges individual segments or products can have a negative impact on the industry overall as well as on sales of the challenged segments or products. Many of our nutraceutical products serve well-established market segments and, absent unforeseen new developments or trends, are not expected to benefit from rapid growth. Our OTCeutical products are newer products that are more likely to be the subject of new scientific studies or announcements, which could be either positive or negative. News or other developments that challenge the safety or effectiveness of these products could negatively impact the profitability of our nutraceutical and OTCeutical business.

The profitability of our consumer products businesses may suffer if we are unable to establish and maintain close working relationships with our customers.

For the quarter ended September 30, 2006, approximately 51% of our revenues were derived from our consumer products business, which consists of our consumer diagnostic products, nutraceuticals and OTCeuticals. These businesses rely to a great extent on close working relationships with our customers rather than long-term exclusive contractual arrangements. Customer concentration in these businesses is relatively high, especially in our nutraceutical and OTCeutical segment where one customer accounted for approximately 34% of revenues during the quarter ended September 30, 2006. In addition,

customers of our branded and private label consumer products businesses purchase products through purchase orders only and are not obligated to make future purchases. We therefore rely on our ability to deliver quality products on time in order to retain and generate customers. If we fail to meet our customers' needs or expectations, whether due to manufacturing issues that affect quality or capacity issues that result in late shipments, we will harm our reputation and customer relationships and likely lose customers. Additionally, if we are unable to maintain close working relationships with our customers, sales of all of our products and our ability to successfully launch new products could suffer. The loss of a major customer and the failure to generate new accounts could significantly reduce our revenues or prevent us from achieving projected growth.

Period-to-period comparisons of our operating results may not be meaningful due to our recent acquisition.

We have recently completed the acquisition of the business of the Alan James Group, LLC which make it difficult to analyze our results and to compare them from period to period. Period-to-period comparisons of our results of operations may not be meaningful due to this acquisition and are not indications of our future performance. Any future acquisitions will also make our results difficult to compare from period to period in the future.

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, \$6.1 million in 2005 and \$4.3 million in the first nine months of 2006. As of September 30, 2006, our accumulated deficit was \$65.5 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.

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

As of September 30, 2006, a single stockholder (Pyxis Innovations) owned, or had rights to own approximately 56.1% 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 warrantholders' 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 Pyxis Innovations 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.

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

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, or, if available, 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.

Protect trade secrets.

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, a significant portion 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 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 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's business area. Loss of the services of Timothy J. Richerson, 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. Each of these employees can terminate his employment upon 30 days notice or less. 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 a Stock Purchase Agreement, dated as of March 5, 2003, 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.

RISKS RELATED TO THIS OFFERING

The price of our common stock may decline after you exercise subscription rights.

Our stock price is volatile. Within the past twelve months, the trading price of our common stock has ranged from a high of \$9.23 per share to a low of \$3.45 per share. We cannot predict its trading range during the period of this offering or beyond. Our common stock may decline in price after you exercise your subscription rights. If such a decline occurs, you will have committed to buy our common stock at a price above the prevailing market price, resulting in an immediate unrealized loss to you. Moreover, following your exercise of subscription rights, you may not be able to sell your common stock at a price equal to or greater than the subscription price. Until certificates are delivered to you or until new shares are issued to you in book-entry form, which will not occur until after the closing of this offering, you may not be able to sell the common stock you purchase in this offering. Certificates representing our common stock purchased by you will be delivered and book-entry issuances will be completed as soon as practicable after the expiration of this offering.

If you do not exercise all of your rights, you may suffer significant dilution of your percentage ownership of our common stock.

This rights offering is designed to enable each of our stockholders to acquire our stock at \$5.6783 per share and thereby maintain their relative proportionate voting and economic interest, giving effect to the purchase of common stock by Pyxis Innovations in August 2006. To the extent that you do not exercise your rights in the rights offering, your proportionate voting interest will be reduced, and the percentage that your original shares represent of our expanded equity after the exercise of the rights will be disproportionately diluted. To the extent that other stockholders purchase the shares you were entitled to purchase in the rights offering, these effects will be more significant.

Once you exercise your subscription rights, you may not revoke the exercise, even if you no longer desire to invest in us.

Once you exercise your subscription rights, you may not revoke the exercise. Therefore, even if circumstances arise, after you have subscribed in the offering, that eliminate your interest in investing in our common stock, you will nevertheless be required to purchase the common stock for which you subscribed.

If you do not act promptly and follow instructions carefully, you may not be able to participate in this offering and your current investment in our company would be diluted.

Stockholders who desire to purchase shares in this rights offering must act promptly to ensure that all required forms and payments are actually received by our subscription agent, U.S. Stock Transfer

Corporation, prior to the expiration date. If you fail to complete and sign the required subscription forms, send an incorrect payment amount, or otherwise fail to strictly follow the subscription procedures that apply to your desired transaction, we may, depending on the circumstances, reject your subscription or accept it only to the extent of the payment received, in which event, your current investment in our company would be diluted.

If we terminate the rights offering, neither we nor the subscription agent will have any obligation to you except to return your subscription payments.

We may terminate the rights offering for any reason prior to the expiration time. If we terminate the rights offering, neither we, nor the subscription agent will have any obligation to you with respect to the rights, except to return your subscription payments, without interest or deduction.

The subscription price may not reflect the value of our company.

The subscription price per share is the same price at which Pyxis Innovations has purchased shares of our common stock under the terms of the Stock Purchase Agreement dated as of August 17, 2006. The subscription price does not necessarily bear any relationship to the book value of our assets, historic or future cash flows, financial condition, recent or historic stock prices or any other established criteria for valuation, and you should not consider the subscription price as any indication of the value of our company. We cannot assure you that our common stock will trade at prices in excess of the subscription price at any time after the date of this prospectus.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. These statements relate to future events or our future financial performance and do not relate strictly to historical or current facts. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our or our industry's results, levels of activity, performance or achievement to be materially different from any future results, levels of activity, performance or achievements expressed or implied in or contemplated by the forward-looking statements. Forward-looking statements can be identified by the use of words such as "anticipate", "estimate", "expect", "project", "intend", "opportunity", "plan", "potential", "believe" or words of similar meaning. They may also use words such as "will", "would", "should", "could" or "may". Forward-looking statements might include one or more of the following:

forecasts of future funding resources;
anticipated clinical trial timelines or results;
anticipated research and product development results;
projected regulatory timelines;
forecasts of future economic performance; and
descriptions or assumptions underlying or relating to any of the above items.

Forward-looking statements express our expectations or predictions of future events or results. A number of factors could cause actual events or results to be significantly different from those described in the forward-looking statement. These statements are not guarantees and are subject to many risks and uncertainties, including those in the "Risk Factors" section. Given these uncertainties, you should not place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus. You should review carefully all risks and uncertainties identified in this prospectus, including the "Risk Factors" section and in the documents incorporated by reference in this prospectus.

USE OF PROCEEDS

Our gross proceeds from the rights offering depend on the number of shares that are purchased. Assuming that rights for all of the shares offered hereby are exercised, we will receive cash proceeds of \$14.4 million, before paying estimated expenses of \$200,000. We will use any net proceeds we receive from the rights offering for general corporate purposes. This represents our present intention for the use of the proceeds of this rights offering based on our current contemplated operations, business plan and the prevailing economic and industry conditions. Changes in the use of proceeds of this rights offering may be made in response to changes in our financial condition, business plans or growth strategy and changes in general industry conditions.

THE RIGHTS OFFERING

GENERAL

As soon as practicable following August 17, 2006, which is the record date for the distribution, we will distribute to each holder of our common stock, at no charge, approximately 0.1041 subscription rights for shares of common stock for each share of our common stock held as of the record date. The rights will be evidenced by rights certificates.

Each right entitles the holder to a basic subscription privilege and an oversubscription privilege. Under the basic subscription privilege, each whole right enables the holder to purchase one share of our common stock at a subscription price of \$5.6783 per share. Each right also has an oversubscription privilege, as described below under the heading "Subscription Privileges Oversubscription Privilege."

Our stockholder Pyxis Innovations has agreed to waive its rights to participate in this offering.

The following describes the rights offering in general and assumes (unless specifically provided otherwise) that you are a record holder of our common stock. If you hold your shares in a brokerage account or through a dealer or other nominee, please see the information included below under the heading "Beneficial Owners."

REASONS FOR THE RIGHTS OFFERING

Our primary reason for this offering is to allow our common stockholders to purchase additional shares of our common stock at the same price as the price paid by Pyxis Innovations in the August 2006 financing described elsewhere in this Prospectus. We are also seeking additional equity for general corporate purposes.

TRANSFERABILITY OF RIGHTS

The rights are not transferable. No trading market exists as of the date of this prospectus for these rights.

DETERMINATION OF SUBSCRIPTION PRICE

Under the terms of our Stock Purchase Agreement with Pyxis Innovations Inc., dated as of August 17, 2006, we issued 2,750,037 shares of common stock for an aggregate purchase price of \$15,615,537, or \$5.6783 per share. The rights distributed in this offering allow our stockholders to buy our common stock at the same price, \$5.6783 per share, as Pyxis Innovations. On October 31, 2006, the last reported price for our common stock on AMEX was \$6.55 per share. We cannot predict the trading price of our common stock at the time of closing this rights offering. Accordingly, purchasers of shares of common stock in the rights offering may pay a premium, or receive a discount, on the purchase of shares as compared to the closing price of our common stock at the time of the closing of the rights offering.

NO FRACTIONAL RIGHTS OR SHARES

We will not issue fractional rights. Instead, we will round any fractional rights to the nearest whole right. For example, if you own 200 shares of common stock, you will receive 21 rights instead of the 20.8186 rights you would have received without rounding and if you own 100 shares of common stock, you will receive 10 rights, instead of the 10.4093 rights you would have received without rounding.

You may request that the subscription agent divide your rights certificate into parts if you are the record holder for a number of beneficial owners of common stock. However, the subscription agent will not divide your rights certificate so that (through rounding or otherwise) you would receive a greater number of rights than those to which you would be entitled if you had not divided your certificate.

FULL SUBSCRIPTION ADJUSTMENT

If all shareholders other than Pyxis Innovations were to subscribe to all rights under this offering, then rights to purchase approximately 2,533,234 shares would have been subscribed. This offering is capped at 2,533,234 shares. Subscriptions granted would be adjusted on a pro rata basis so that the total number of shares issued and funds raised do not exceed 2,533,234 and \$14.4 million in gross proceeds, respectively. For example, if you own 200 shares and subscribed to receive 30 rights, and all other shareholders other than Pyxis subscribed for the full amount of rights per their shareholding as of the effective date, your subscription would be adjusted on a pro rata basis to 21 rights or 0.105 subscription rights per share of common stock. In this case we would refund promptly to the shareholder 9 rights, which, at \$5.6783 per right, is \$51.11, representing the pro rata portion of the rights that exceeded the share cap.

EXPIRATION TIME AND DATE

You may exercise the basic subscription privilege and oversubscription privilege at any time before the expiration time, which is 5:00 p.m., Eastern Standard Time, on January , 2007, unless the rights offering is extended. If you do not exercise your rights before the expiration time, then your rights will expire and become null and void. We will not be obligated to honor your exercise of rights if the subscription agent receives any of the required documents relating to your exercise after the expiration time, regardless of when you transmitted the documents, except if you have timely transmitted the documents pursuant to the guaranteed delivery procedures described below.

We may extend the expiration time for any reason at our sole discretion, and you will not be able to revoke your exercise of subscriptions. If we elect to extend the date the rights expire, we will issue a press release announcing the extension before 9:00 a.m. on the first business day after the most recently announced expiration time.

SUBSCRIPTION PRIVILEGES

Your rights entitle you to a basic subscription privilege and an oversubscription privilege.

Basic Subscription Privilege

The basic subscription privilege entitles you to purchase one share of our common stock per whole right held, upon delivery of the required documents and payment of the subscription price per share, prior to the expiration time. You are not required to exercise your basic subscription privilege, in full or in part, unless you wish to also purchase shares under your oversubscription privilege described below.

Oversubscription Privilege

The oversubscription privilege entitles you to purchase shares of common stock offered in the rights offering which are not purchased by other rightsholders pursuant to their basic subscription privilege. You will be permitted to purchase shares of common stock pursuant to your oversubscription

privilege only if other rightsholders do not exercise their basic subscription privilege in full. You may exercise your oversubscription privilege only if you exercise your basic subscription privilege in full. If you wish to exercise your oversubscription privilege, you must specify the number of additional shares you wish to purchase, which may be up to the maximum number of shares offered in the rights offering, less the number of shares you may purchase under your basic subscription privilege.

Pro Rata Allocation

If there are not enough shares to satisfy all subscriptions pursuant to the exercise of the oversubscription privilege, we will allocate the shares that are available for purchase under the oversubscription privilege pro rata (subject to the elimination of fractional shares) among those rightsholders who exercise their oversubscription privilege. Pro rata means that you will be allocated oversubscription shares in proportion to your percentage ownership of our common stock as of the record date compared to the total percentage of ownership of all rightsholders participating in the oversubscription round or, if less, the number of shares for which you oversubscribe. If there is a need to prorate the exercise of rights pursuant to the oversubscription privilege and the pro rata potion results in the allocation to you of a greater number of shares than you subscribed for pursuant to the oversubscription privilege, then we will allocate to you only the number of shares for which you subscribed pursuant to your oversubscription privilege. We will allocate the remaining shares among all other rightsholders exercising their oversubscription privileges.

For example, if there are 1,600,000 available shares under the oversubscription privilege and the only oversubscribing stockholders are a 10% stockholder subscribing for 1,000,000 additional shares, then the pro rata allocation of the stockholders would be determined as follows:

	Total Ownership	Oversubscribers' Comparative Ownership	Oversubscription Rights Available	Subscribed To	Prorated Shares	Re- Allocation	Subscription Shares
Stockholder A	10%	67%		1,000,000	1,066,667	(66,667)	1,000,000
			1,600,000				
Stockholder B	5%	33%		1,000,000	533,333	66,667	600,000
	15%	100%		2,000,000	1,600,000		1,600,000

Because Stockholder A only subscribed for 1,000,000 additional shares, the remaining 66,667 would be reallocated to Stockholder B since he, she or it was the only stockholder to subscribe for these shares. Stockholder B would receive a total of 600,000 (533,333 + 66,667) additional shares. As soon as practicable after the expiration date, January , 2007, U.S. Stock Transfer Corporation, acting as our subscription agent, will determine the number of shares that you may purchase pursuant to the oversubscription privilege.

Full Exercise of Basic Subscription Privilege

You may exercise your oversubscription privilege only if you exercise, in full, your basic subscription privilege for all rights represented by a single rights certificate. To determine if you have fully exercised your basic subscription privilege, we will consider only the basic subscription privilege held by you in the same capacity under a single rights certificate. For example, if you were granted rights under a single rights certificate for shares of common stock you own individually and rights under a single rights certificate for shares of common stock you own jointly with your spouse, you only need to fully exercise your basic subscription privilege with respect to your individually owned rights in order to exercise your oversubscription privilege with respect to those rights. You do not have to subscribe for any shares under the basic subscription privilege owned jointly with your spouse to exercise your individual oversubscription privilege. If you transfer a portion of your rights, you may

exercise your oversubscription privilege if you exercise all of the remaining rights represented by the rights certificate you receive back from the subscription agent following the transfer.

You must exercise your oversubscription privilege at the same time as you exercise your basic subscription privilege in full.

If you own your shares of common stock through your broker, dealer or other nominee holder and you wish for them to exercise your oversubscription privilege on your behalf, the nominee holder will be required to certify to us and the subscription agent:

the number of shares of our common stock held on the record date on your behalf;

the number of rights you exercised under your basic subscription privilege;

that your entire basic subscription privilege held in the same capacity has been exercised in full; and

the number of shares of common stock you subscribed for pursuant to the oversubscription privilege.

Your nominee holder must also disclose to us certain other information received from you.

Return of Excess Payment

If you exercise your oversubscription privilege and are allocated less than all of the shares of common stock for which you subscribed, the funds you paid for those shares of common stock that are not allocated to you will be returned by mail or similarly prompt means, without interest or deduction, as soon as practicable after the expiration time.

METHODS OF EXERCISING RIGHTS

You may exercise your rights by delivering the following to the subscription agent before the expiration time:

your properly completed and executed rights certificate evidencing the exercised rights with any required signature guarantees or other supplemental documentation; and

your payment in full of the subscription price for each share of common stock subscribed for pursuant to the basic subscription privilege and the oversubscription privilege.

Alternatively, if you deliver a notice of guaranteed delivery together with your subscription price payment prior to the expiration time, you must deliver the rights certificate within three business days after the expiration time using the guaranteed delivery procedures described below under the heading "Guaranteed Delivery Procedures."

Payment of Subscription Price

Your cash payment of the subscription price must be made by either check or bank draft drawn upon a U.S. bank or postal, telegraphic or express money order payable to the subscription agent.

Your cash payment of the subscription price will be deemed to have been received by the subscription agent only when:

any uncertified check clears; or

the subscription agent receives any certified check or bank draft drawn upon a U.S. bank or any postal, telegraphic or express money order.

You should note that funds paid by uncertified personal checks may take five business days or more to clear. If you wish to pay the subscription price by an uncertified personal check, we urge you to make payment sufficiently in advance of the time the rights expire to ensure that your payment is

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received and clears by that time. We encourage you to use a certified or cashier's check, or money order to avoid missing the opportunity to exercise your rights.

We will retain any interest earned on the cash funds held by the subscription agent prior to the earlier of the consummation or termination of the rights offering.

The subscription agent will hold your payment of the subscription price in a segregated escrow account with other payments received from holders of rights until we issue to you your shares of common stock and return your overpayment, if any.

Exercising a Portion of Your Rights

If you subscribe for fewer than all of the shares of common stock that you are eligible to purchase pursuant to the basic subscription privilege represented by your rights certificate, you may request from the subscription agent a new rights certificate representing the unused rights. If you exercise less than all of your rights represented by a single rights certificate, you may not exercise the oversubscription privilege.

Calculation of Rights Exercised

If you do not indicate the number of rights being exercised, or do not forward full payment of the aggregate subscription price for the number of rights that you indicate are being exercised, then you will be deemed to have exercised the basic subscription privilege with respect to the maximum number of rights that may be exercised for the aggregate subscription price payment you delivered to the subscription agent. If your aggregate subscription price payment is greater than the amount you owe for your basic subscription and no direction is given as to the excess, you will be deemed to have exercised the oversubscription privilege to purchase the maximum number of shares available to you pursuant to your oversubscription privilege that may be purchased with your overpayment. If we do not apply your full subscription price payment to your purchase of shares of common stock, we will return the excess amount to you by mail or similarly prompt means, without interest or deduction as soon as practicable after the expiration time.

Completion and Delivery of the Rights Certificate

You should read and follow the instructions accompanying the rights certificate carefully. If you choose to exercise your rights, you must send your completed rights certificates, any necessary accompanying documents and payment of the subscription price to the subscription agent. YOU SHOULD NOT SEND THE RIGHTS CERTIFICATES, ANY OTHER DOCUMENTATION OR PAYMENT TO US. Any rights certificates and other items received by us will be returned to the sender as promptly as possible.

You are responsible for the method of delivery of rights certificates, any necessary accompanying documents and payment of the subscription price to the subscription agent. If you send the rights certificates and other items by mail, we recommend that you send them by registered mail, properly insured, with return receipt requested. You should allow a sufficient number of days to ensure delivery to the subscription agent and clearance of cash payment prior to the expiration time.

Signature Guarantee May Be Required

Your signature on each rights certificate must be guaranteed by an eligible institution, such as a member firm of a registered national securities exchange, a member of the National Association of Securities Dealers, Inc. or a commercial bank or trust company having an office or correspondent in the United States, subject to standards and procedures adopted by the subscription agent, unless:

your rights certificate is registered in your name; or

you are an eligible institution.

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Delivery of Subscription Materials and Payment

If you are a shareholder of record, you should deliver the rights certificate and payment of the subscription price, notices of guaranteed delivery and any other required documentation by hand delivery, overnight delivery or mail to:

U.S. Stock Transfer Corporationp 1745 Gardena Avenue; Suite 200 Glendale, CA 91204 Attention: Stock Transfer Department

You may also call the subscription agent at (818) 502-1404.

If you are a beneficial owner, forward your subscription forms and payment to your broker, dealer or other nominee.

Guaranteed Delivery Procedures

If you wish to exercise your rights, but you do not have sufficient time to deliver the rights certificates evidencing your rights to the subscription agent before the expiration time, you may exercise your rights by the following guaranteed delivery procedures:

provide your payment in full of the subscription price for each share of common stock being subscribed for pursuant to the basic subscription privilege and the oversubscription privilege to the subscription agent before the expiration time;

deliver a notice of guaranteed delivery to the subscription agent at or before the expiration time; and

deliver the properly completed rights certificates evidencing the rights being exercised, with any required signatures guaranteed, to the subscription agent, within three (3) business days following the date the notice of guaranteed delivery was received by the subscription agent.

Your notice of guaranteed delivery must be substantially in the form provided with the "Instructions For Use of Interleukin Genetics, Inc. Rights Certificates" distributed to you with your rights certificate. Your notice of guaranteed delivery must come from an eligible institution which is a member of, or a participant in, a signature guarantee program acceptable to the subscription agent. In your notice of guaranteed delivery you must state:

your name;

the number of rights represented by your rights certificates, the number of shares of common stock you are subscribing for pursuant to the basic subscription privilege, the number of shares of common stock, if any, you are subscribing for pursuant to the oversubscription privilege; and

your guarantee that you will deliver to the subscription agent any rights certificates evidencing the rights you are exercising within three business days following the date the subscription agent receives your notice of guaranteed delivery.

You may deliver the notice of guaranteed delivery to the subscription agent in the same manner as the rights certificates at the address set forth under the heading "Delivery of Subscription Materials and Payment" above. You may also transmit the notice of guaranteed delivery to the subscription agent by facsimile transmission to (818) 502-0674. To confirm facsimile deliveries, you may call the subscription agent at (818) 502-1404.

Notice to Nominees

If you are a broker, a dealer, a trustee or a depository for securities who holds shares of our common stock for the account of others as a nominee holder, you should notify the respective

beneficial owners of those shares of the issuance of the rights as soon as possible to find out the beneficial owners' intentions. You should obtain instructions from the beneficial owners with respect to the rights, as set forth in the instructions we have provided to you for your distribution to beneficial owners. If a beneficial owner so instructs, you should complete the appropriate rights certificates and, in the case of the oversubscription privilege, the related nominee holder certification, and submit them to the subscription agent with the proper payment. A nominee holder that holds shares for the account(s) of more than one beneficial owner may exercise the number of rights to which all such beneficial owners in the aggregate otherwise would have been entitled if they had been direct record holders of common stock on the record date, so long as the nominee submits the appropriate rights certificates and certifications and proper payment to the subscription agent.

Beneficial Owners

If you are a beneficial owner of shares of our common stock or rights that you hold through a nominee holder, we will ask your broker, dealer or other nominee to notify you of this rights offering. If you wish to exercise your rights, you will need to have your broker, dealer or other nominee act for you. To indicate your decision with respect to your rights, you should complete and return to your broker, dealer or other nominee the form entitled "Beneficial Owners Election Form." You should receive this form from your broker, dealer or other nominee with the other subscription materials.

Procedures for DTC Participants

We expect that your exercise of your basic subscription privilege and oversubscription privilege may be made through the facilities of The Depository Trust Company, or DTC. In the case of holders of rights that are held of record through DTC, exercises of the basic subscription privilege and oversubscription privilege may be effected by instructing DTC to transfer rights (such rights being "DTC Exercised Rights") from the DTC account of such holder to the DTC account of the subscription agent, together with payment of the subscription price for each share of common stock subscribed for pursuant to the basic subscription privilege.

Determinations Regarding the Exercise of Rights

We will decide all questions concerning the timeliness, validity, form and eligibility of your exercise of rights. Our decisions will be final and binding. We, in our sole discretion, may waive any defect or irregularity, or permit a defect or irregularity to be corrected within whatever time we determine. We may reject the exercise of any of your rights because of any defect or irregularity. Your subscription will not be deemed to have been received or accepted until all irregularities have been waived by us or cured by you within the time we decide upon, in our sole discretion.

We reserve the right to reject your exercise of rights if your exercise is not in proper form or has not been made in accordance with the terms of the rights offering. Neither we nor the subscription agent will have any duty to notify you of a defect or irregularity in your exercise of the rights. We will not be liable for failing to give you that notice. We will also not accept your exercise of rights if our issuance of shares of common stock pursuant to your exercise could be deemed unlawful or materially burdensome. See "Regulatory Limitation" and "Compliance with State Regulations Pertaining to the Rights Offering" below.

NO REVOCATION OF EXERCISED RIGHTS

Once you have exercised your basic subscription privilege, and, should you choose, your oversubscription privilege, you may not revoke your exercise. Even if we extend the expiration time, you may not revoke your exercise.

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SUBSCRIPTION AGENT

We have appointed U.S. Stock Transfer Corporation as subscription agent for this rights offering. We will pay its fees and expenses related to the rights offering.

NO RECOMMENDATIONS TO RIGHTSHOLDERS

Neither we, nor our Board of Directors, has made any recommendation as to whether you should exercise your rights. You should decide whether to subscribe for shares of our common stock or simply take no action with respect to your rights, based upon your own assessment of your best interests.

TERMINATION

We may terminate the rights offering for any reason at any time before the expiration time. If we terminate the rights offering, we will promptly issue a press release announcing the termination, and we will promptly thereafter return all subscription payments. We will not pay interest on, or deduct any amounts from, subscription payments if we terminate the rights offering.

FOREIGN STOCKHOLDERS

We will not mail rights certificates to stockholders on the record date whose addresses are outside the United States. Instead, we will have the subscription agent hold the rights certificates for those holders' accounts. To exercise their rights, foreign holders must notify the subscription agent before 5:00 p.m., Eastern Standard Time, on January , 2007, five business days prior to the expiration time, and must establish to the satisfaction of the subscription agent that such exercise is permitted under applicable law.

REGULATORY LIMITATION

We will not be required to issue to you shares of our common stock pursuant to the rights offering if, in our opinion, you would be required to obtain prior clearance or approval from any state or federal regulatory authorities to own or control such shares and if, at the expiration time, you have not obtained such clearance or approval.

ISSUANCE OF COMMON STOCK

Unless we earlier terminate the rights offering, the subscription agent will issue to you the shares of our common stock purchased by you in the rights offering as soon as practicable after the expiration time. Each subscribing holder's new shares will be issued in the same form, certificated or book-entry, as the rights exercised by that holder.

Your payment of the aggregate subscription price will be retained by the subscription agent and will not be delivered to us, unless and until your subscription is accepted and you are issued your stock certificates. We will not pay you any interest on funds paid to the subscription agent, regardless of whether the funds are applied to the subscription price or returned to you. You will have no rights as a stockholder of our company with respect to the subscribed for shares of our common stock until the certificates representing such shares are issued to you or the shares are deposited in the book-entry account held on your behalf. Upon our issuance of the certificates or the deposit of the shares in the applicable book-entry account, you will be deemed the owner of the shares you purchased by exercise of your rights. Unless otherwise instructed in the rights certificates, the shares issued to you pursuant to your subscription will be registered in your name or the name of your nominee, if applicable.

We will not issue any fractional shares of common stock. You may only exercise whole rights; fractional rights may not be exercised.

SHARES OF COMMON STOCK OUTSTANDING

As of October 31, 2006 we had outstanding approximately 27.3 million shares of our common stock. The number of outstanding shares of our common stock will increase by 2.5 million following the issuance of all shares purchased in the rights offering (assuming that rights for all of the shares offered hereby are exercised), which represents approximately a 9% increase in the number of outstanding shares of our common stock. The share numbers included in this paragraph exclude outstanding stock options and warrants to purchase shares of our common stock and shares of common stock issuable upon exercise of convertible notes.

COMPLIANCE WITH STATE REGULATIONS PERTAINING TO THE RIGHTS OFFERING

We are not making the rights offering in any state or other jurisdiction in which it is unlawful to do so. We will not sell or accept an offer to purchase shares of our common stock from you if you are a resident of any state or other jurisdiction in which the sale or offer of the rights would be unlawful. We may delay the commencement of the rights offering in certain states or other jurisdictions in order to comply with the laws of those states or other jurisdictions. However, we may decide, in our sole discretion, not to modify the terms of the rights offering as may be requested by certain states or other jurisdictions. If that happens and you are a resident of the state or jurisdiction that requests the modification, you will not be eligible to participate in the rights offering. We do not expect that there will be any changes in the terms of the rights offering.

QUESTIONS AND ASSISTANCE CONCERNING THE RIGHTS

If you have any questions or need assistance concerning the procedures for exercising your subscription rights, or if you would like additional copies of this prospectus or the instructions, you should contact us as follows:

Interleukin Genetics, Inc. 135 Beaver Street Waltham, MA 02452 Attention: John J. McCabe Tel: (781) 398-0700

For further assistance on how to subscribe for shares, you may also contact U.S. Stock Transfer Corporation, the subscription agent for the rights offering, by mail or telephone at:

U.S. Stock Transfer Corporation 1745 Gardena Avenue; Suite 200 Glendale, CA 91204 Attention: Stock Transfer Department Tel: (818) 502-1404

PLAN OF DISTRIBUTION

We intend to distribute rights and copies of this prospectus to those persons who were stockholders on August 17, 2006 (the record date) promptly following the effective date of the registration statement of which this prospectus forms a part.

Shares of our common stock issued upon exercise of rights will be traded on the American Stock Exchange and the Boston Stock Exchange.

We will pay the fees and expenses of the subscription agent, U.S. Stock Transfer Corporation.

Certain of our employees, officers or directors may solicit responses from you to the rights offering, but such individuals will not receive any commissions or compensation for such services other than their normal employment compensation.

We have not engaged any financial advisor for solicitation of the exercise of rights or to provide advice to the Board of Directors regarding terms, structure or timing of the rights offering.

LEGAL MATTERS

The validity of the common stock offered in this prospectus will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts.

EXPERTS

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting of Interleukin Genetics included in our Annual Report on Form 10-K for the year ended December 31, 2005, incorporated by reference in this prospectus and elsewhere in the registration statement have been audited by Grant Thornton LLP, independent registered public accounting firm, as indicated in their reports with respect thereto, and are included herein in reliance upon the authority of said firm as experts in accounting and auditing.

Morrison, Brown, Argiz & Farra, LLP, independent auditors, have audited the consolidated financial statements of Alan James Group, Inc. and Related Companies at December 31, 2005 and 2004, and for each of the two years in the period ended December 31, 2005, as set forth in their report. We have included the consolidated financial statements of Alan James Group, Inc. and Related Companies in the prospectus and elsewhere in the registration statement in reliance on Morrison, Brown, Argiz & Farra, LLP's report, given on their authority as experts in accounting and auditing.

MATERIAL CHANGES

None.

WHERE YOU CAN FIND MORE INFORMATION

We are a public company and file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference room. Our SEC filings are also available to the public at the SEC's web site at http://www.sec.gov. In addition, our common stock is listed for trading on the American Stock Exchange under the symbol "ILI" and on the Boston Stock Exchange under the symbol "ILG."

This prospectus is only part of a Registration Statement on Form S-3 that we have filed with the SEC under the Securities Act of 1933 and therefore omits certain information contained in the Registration Statement. We have also filed exhibits and schedules with the Registration Statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may:

inspect a copy of the Registration Statement, including the exhibits and schedules, without charge at the public reference room,

obtain a copy from the SEC upon payment of the fees prescribed by the SEC, or

obtain a copy from the SEC web site.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with them, which means that we can disclose important information in this prospectus by referring to those documents. The information incorporated by reference is considered to be part of this

prospectus, and information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and prior to the time that all of the securities offered by this prospectus are sold.

Our Current Report on Form 8-K, filed with the SEC on February 28, 2006;

Our Current Report on Form 8-K, filed with the SEC on March 10, 2006;

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2005, filed with the SEC on March 16, 2006;

Our Current Report on Form 8-K, filed with the SEC on March 31, 2006;

Proxy Statement on Schedule 14A, filed with the SEC on April 28, 2006;

Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2006, filed with the SEC on May 10, 2006;

Our Current Report on Form 8-K, filed with the SEC on June 12, 2006;

Our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2006, filed with the SEC on August 9, 2006;

Our Current Report on Form 8-K, filed with the SEC on August 21, 2006, as amended by our Current Report on Form 8-K/A filed with the SEC on October 31, 2006;

Our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2006, filed with the SEC on November 9, 2006; and

The description of our common stock contained in Item 1 of our Registration Statement on Form 8-A dated December 27, 2005.

You may request, orally or in writing, a copy of these filings, which will be provided to you at no cost, by contacting Investor Relations, at our principal executive offices, which are located at 135 Beaver Street, Waltham, Massachusetts 02452. Our telephone number is (781) 398-0700.

To the extent that any statements contained in a document incorporated by reference are modified or superseded by any statements contained in this prospectus, such statements shall not be deemed incorporated in this prospectus except as so modified or superseded.

All documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act and prior to the termination of this offering are incorporated by reference and become a part of this prospectus from the date such documents are filed. Any statement contained in this prospectus or in a document incorporated by reference is modified or superseded for purposes of this prospectus to the extent that a statement contained in any subsequent filed document modifies or supersedes such statement.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses payable in connection with the sale of the common stock being registered hereby. Except for the SEC registration fee, all expenses are estimated:

SEC registration fee	\$	1,539
Printing and engraving expenses		10,000
Accounting fees and expenses		20,000
Subscription agent fees and expenses		10,000
Legal fees and expenses		150,000
Blue sky fees and expenses		5,000
Miscellaneous		3,461
	_	
TOTAL	\$	200,000

All expenses incurred in connection with this offering will be borne by us.

Item 15. Indemnification of Directors and Officers

Subsection (a) of Section 145 of the General Corporation Law of Delaware empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a resumption believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) or in defense of any claim, issue or matter therein, the person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that the indemnification provided by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and that the scope of indemnification extends to directors, officers, employees, or agents of a constituent corporation absorbed in a consolidation or merger and persons serving in that capacity at the request of the constituent corporation for another. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of a director or officer of the corporation against any liability asserted against such person or incurred by such person in any such capacity or arising out of such person's status as such whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

The registrant's bylaws specifies that the registrant shall indemnify its directors and officers to the full extent permitted by the General Corporation Law of Delaware. This provision of the bylaws is deemed to be a contract between the registrant and each director and officer who serves in such capacity at any time while such provision and the relevant provisions of the General Corporation Law of Delaware are in effect, and any repeal or modification thereof shall not offset any rights or obligations then existing with respect to any state of facts then or theretofore existing or in any action, suit or proceeding theretofore or thereafter brought or threatened in whole or in part upon any such state of facts.

Section 102(b)(7) of the Delaware General Corporation Law enables a corporation in its certificate of incorporation to limit the personal liability of members of its board of directors for violation of a director's fiduciary duty of care. This Section does not, however, limit the liability of a director for breaching his duty of loyalty, failing to act in good faith, engaging in intentional misconduct or knowingly violating a law, or from any transaction in which the director derived an improper personal benefit. This Section also will have no effect on claims arising under the federal securities laws. The registrant's certificate of incorporation limits the liability of its directors as authorized by Section 102(b)(7). The registrant also has indemnification agreements with our directors and officers that provide for the maximum indemnification allowed by law.

We have an insurance policy which insures our directors and officers and those of our subsidiaries against certain liabilities which might be incurred in connection with the performance of their duties.

At present, there is no pending litigation or proceeding involving a director or officer of the registrant as to which indemnification is being sought nor is the registrant aware of any threatened litigation that may result in claims for indemnification by any director or officer.

Item 16. Exhibits

(iii)

EXHII NO.	ВІТ	EXHIBIT
	5.1	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. with respect to the legality of the shares of common stock being registered (filed herewith).
	23.1	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1 to this Registration Statement on Form S-3).
	23.2	Consent of Grant Thornton LLP.
	23.3	Consent of Morrison, Brown, Argiz & Farra, LLP.
	24.1	Power of Attorney (included in the signature page in Part II of this Registration Statement on Form S-3).
	99.1	Form of Subscription Certificate.
	99.2	Form of Letter to Stockholders of Record.
	99.3	Form of Letter to Brokers, Dealers and Nominees.
	99.4	Form of Letter from Brokers, Dealers and Nominees to Clients.
	99.5	Form of Instructions For Use of Interleukin Genetics, Inc. Rights Certificates.
	99.6	Form of Guaranteed Delivery.
Item 1	99.7 17. Und	Form of Subscription Agent Agreement between Interleukin Genetics, Inc. and U.S. Stock Transfer Corporation. ertakings
(a)	The	undersigned registrant hereby undertakes as follows:
	(1)	To file, during any period in which offers or sales are being made, a post-effective amendment to this registration states
		(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
		To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundament change in the information in the registration statement. Notwithstanding the foregoing, any increase or decreat volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in "Calculation of Registration Fee" table in the effective registration statement.

provided, however, That: paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the registration statement is on Form S-3 or Form F-3, and the information required to be included in a post-effective amendment by those

registration statement or any material change to such information in the registration statement;

To include any material information with respect to the plan of distribution not previously disclosed in the

paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d)

of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3)

 To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i)

 If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5)

 That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii)

 Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii)

 The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b)

 The undersigned registrant hereby undertakes that, for the purpose of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be

deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless, in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Amendment No. 1 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, State of Massachusetts, on December 5, 2006.

INTERLEUKIN GENETICS, INC.

By: /s/ TIMOTHY J. RICHERSON

Chief Executive Officer
(Principal Executive Officer)

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signatures	Title	Date	
*	Chief Executive Officer (Principal Executive	December 5, 2006	
Timothy J. Richerson	Officer)	December 3, 2000	
*	Chairman of the Board of Directors	December 5, 2006	
Thomas R. Curran, Jr.	Chairman of the Board of Directors	December 5, 2000	
*	Principal Financial Officer and Principal	December 5, 2006	
John J. McCabe	Accounting Officer	December 5, 2000	
*	Director	December 5, 2006	
Dianne E. Bennett	Birector	December 3, 2000	
*	Director	December 5, 2006	
George D. Calvert	Director	December 3, 2000	
*	Director	December 5, 2006	
Kenneth S. Kornman	Director	December 5, 2000	
* /s/ TIMOTHY J. RICHERSON			
Attorney-in-fact	II-6		

EXHIBIT INDEX

EXHIBIT NO.	ЕХНІВІТ
5.1	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. with respect to the legality of the shares of common stock being registered (filed herewith).
23.1	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1 to this Registration Statement on Form S-3).
23.2	Consent of Grant Thornton LLP.
23.3	Consent of Morrison, Brown, Argiz & Farra, LLP.
24.1	Power of Attorney (included in the signature page in Part II of this Registration Statement on Form S-3).
99.1	Form of Subscription Certificate.
99.2	Form of Letter to Stockholders of Record.
99.3	Form of Letter to Brokers, Dealers and Nominees.
99.4	Form of Letter from Brokers, Dealers and Nominees to Clients.
99.5	Form of Instructions For Use of Interleukin Genetics, Inc. Rights Certificates.
99.6	Form of Guaranteed Delivery.
99.7	Form of Subscription Agent Agreement between Interleukin Genetics, Inc. and U.S. Stock Transfer Corporation.