

BG Medicine, Inc.
Form S-1/A
December 28, 2007

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As filed with the Securities and Exchange Commission on December 28, 2007

Registration No. 333-145124

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

AMENDMENT NO. 7

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

BG Medicine, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State of Incorporation)

8071
(Primary Standard Industrial
Classification Code Number)

04-3506204
(I.R.S. Employer
Identification Number)

**610 Lincoln Street North
Waltham, Massachusetts 02451
(781) 890-1199**

(Address, Including Zip Code, and Telephone Number,
Including Area Code, of Registrant's Principal Executive Offices)

Pieter Muntendam, M.D.
President and Chief Executive Officer
BG Medicine, Inc.
610 Lincoln Street North
Waltham, Massachusetts 02451
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(Name, Address, Including Zip Code, and Telephone Number,
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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 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, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) 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 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 post-effective amendment filed pursuant to Rule 462(d) 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.

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 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

PROSPECTUS (Subject to Completion)

Dated December 28, 2007

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 or jurisdiction where the offer or sale is not permitted.

4,500,000 Shares

Common Stock

This is the initial public offering of shares of our common stock. We are offering 4,500,000 shares of our common stock. Prior to this offering, there has been no public market for our common stock. We have applied for the listing of our common stock on the NASDAQ Global Market under the symbol "BGMD". We expect that the initial public offering price will be between \$8.00 and \$10.00 per share.

Our business and an investment in our common stock involve significant risks. These risks are described under the caption "Risk Factors" beginning on page 9 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	<u>Per Share</u>	<u>Total</u>
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to BG Medicine, Inc.	\$	\$

The underwriters have a 30-day option to purchase up to an additional 675,000 shares from us at the initial public offering price, less the underwriting discount, to cover overallocments.

The underwriters expect to deliver the shares on or about 2008.

Bookrunning Manager

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Co-Manager

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, 2008

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You should rely only on the information contained in this prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

Information contained on our website is not part of this prospectus.

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere in this prospectus and does not contain all of the information you should consider before investing in our common stock. You should carefully read this prospectus and the registration statement of which this prospectus is a part in their entirety before investing in our common stock, including the information discussed under "Risk Factors" beginning on page 9 and our consolidated financial statements and notes thereto that appear elsewhere in this prospectus.

Our Company

Summary of Our Business

We are an early stage life sciences company focused on the discovery, development and commercialization of novel molecular diagnostics based on biomarkers to improve patient outcomes and contain healthcare costs. We discover biomarkers and are developing molecular diagnostic tests based on biomarkers that are intended to provide information to physicians that will improve patient treatment decisions. We are designing our molecular diagnostic tests to predict a patient's response to a drug therapy, determine the potential toxicity of therapeutic agents to patients, identify patients who have or are likely to develop a specific disease, predict a patient's prognosis once a disease has been diagnosed and monitor a patient's disease progression or drug response. We discover biomarkers and are developing our product candidates using our proprietary, versatile, scalable technology platform. Our platform is the discovery engine that enables us to identify new biomarkers by integrating and automating the measurement, analysis, characterization and interpretation of proteins and small non-protein biological molecules, or metabolites, collected from bodily fluids. With our robust technology platform, we believe that we are well-positioned to rapidly and cost-effectively discover new high-value biomarkers and develop molecular diagnostic tests based on these biomarkers over a broad range of therapeutic categories that promise to be highly correlated to clinical outcomes. We have validated our technology platform over five years of extensive collaborative research. We have collaborations and initiatives with major pharmaceutical companies, the Food and Drug Administration, or FDA, and other healthcare organizations. We currently have no products approved or available for sale and, to date, the revenues we have generated do not come from product sales. Subject to the completion of development activities and clearance from the FDA, we expect to introduce our first molecular diagnostic product in 2009.

Our Market Opportunity

A changing healthcare treatment paradigm is emerging in which individualized diagnostic information will play an increasingly important role in improving patient care and containing rapidly growing healthcare costs. In recent years, many innovative, high-cost therapies have become available, including drugs that cost in excess of \$50,000 per patient annually. However, many of these therapies are effective only in a minority of the patients for whom they are prescribed. Physicians currently have limited tools to identify patients for whom a drug will be effective or safety may be a concern. We are designing our molecular diagnostic product candidates to provide medical professionals with information that facilitates prescribing the right drugs for the right patients at the right time. Health insurance companies are showing an increased willingness to pay for molecular diagnostic tests that promise to contain healthcare costs. As a result, molecular diagnostics is the fastest growing category within the overall *in vitro* diagnostics market. According to a report published by Kalorama Information, Inc., a division of MarketResearch.com, the field of molecular diagnostics is expected to grow in the seven largest markets around the world from nearly \$18 billion in sales in 2006 to \$92 billion in 2016, which represents a 17.7% compound annual growth rate, or CAGR.

Our Product Candidates

We have created a broad pipeline of product candidates that focus on cardiovascular disease, cancer and central nervous system, or CNS, disorders. Our lead molecular diagnostic product candidate is based on a biomarker for congestive heart failure, or CHF, which is a condition in which the heart cannot pump enough blood to the rest of the body. CHF affects an estimated 5 million people in the United States and we believe a similar number in Europe. Based on the results of two independent prospective studies, we believe that measurements of two proteins found in plasma, called NT-proBNP and galectin-3, have clinical utility as a predictor for survival in both acute and stable CHF. We plan to leverage the data from these studies to develop a molecular diagnostic test for the severity and prognosis of patients with CHF by measuring the plasma levels of galectin-3 alone and in combination with NT-proBNP. Subject to completion of various development activities, we intend to seek regulatory clearance from the FDA in the fourth quarter of 2008, and pending clearance by the FDA, expect to introduce a molecular diagnostic test based on the galectin-3 biomarker in the United States in 2009. Our other lead product candidates are molecular diagnostic tests based on biomarkers that may be used to detect asymptomatic coronary artery stenosis, or narrowing of the arteries leading to the heart, as well as biomarkers in people with atherosclerotic cardiovascular disease, commonly known as vulnerable plaque, that identify patients at the highest risk for heart attack or stroke within two to three years. In December 2007, we launched a large-scale clinical study of up to 7,300 participants which may support regulatory filings for our vulnerable plaque product candidate and some of our other cardiovascular product candidates.

In addition to these molecular diagnostic product candidates in development, we are also leveraging our technology platform, initiatives and collaborations to discover new biomarkers. Based on the capacity of our technology platform and our experience to date in biomarker discovery, we believe that we can develop and launch up to four new molecular diagnostic tests per year. Some of our other product candidates that we expect to advance rapidly are based on programs we began recently to discover biomarkers for predicting and monitoring the response of cancer patients to treatment with Herceptin® (trastuzumab) or Avastin® (bevacizumab). We believe that our technology platform will enable us to maintain a broad product pipeline and thus diversify our product development risk. In addition, we expect our products to have shorter development times and less onerous regulatory requirements than are typical for therapeutic products. As a result, we believe that our product development strategy will allow us to benefit from current healthcare trends with a lower risk approach than a therapeutically focused biotechnology company.

Our Technology Platform

We have built a proprietary technology platform to discover novel biomarkers that we use to generate new product candidates. Our approach involves the integrated analysis of thousands of precise measurements of proteins, metabolites and nucleic acids. Our technology platform allows us to pursue the most promising commercial opportunities because it is not constrained by biology or specimen type. Moreover, the flexibility of our platform allows us to develop tests that use easily obtainable biological samples, such as blood and urine. We have secured access to clinical samples for biomarker discovery and diagnostic test validation from collaborators. For example, we have established a partnership with Humana Inc., or Humana, a health insurance company, to enable cost-effective biomarker validation studies among its membership. Our high throughput platform is automated and highly scalable, with capacity, in its current configuration, for 16 to 20 new discovery projects per year. We are able to complete the discovery stage and determine whether to move forward with a particular project within approximately 120 days, on average, after receiving samples. This minimizes costs and enables us to focus solely on projects with higher probabilities of success. Based on our experience to date, at our current capacity, we believe that we will be able to develop and launch up to four new high-value molecular diagnostic tests per year.

The strength of our technology platform has been validated through our multiple initiatives and collaborations with leading pharmaceutical companies and healthcare organizations. In February 2007, we announced a collaboration with the FDA and seven pharmaceutical companies in one of the projects under the FDA's Critical Path Initiative, called LTBS, or liver toxicity biomarker study, to discover a new biomarker to predict drug-induced human liver toxicity. Because liver toxicity is one of the leading causes of drug failure in clinical trials, a biomarker for liver toxicity could significantly reduce drug failure rates in clinical trials and consequently improve pharmaceutical research and development productivity. In January 2007, we announced that we are leading the HRP initiative for high-risk plaque with Philips Medical Systems Nederland B.V., or Philips, AstraZeneca AB, or AstraZeneca, Merck & Co., Inc., or Merck, and Humana to discover biomarkers for the early detection of coronary artery disease. Last year we entered into a strategic partnership with Philips to discover biomarkers for use in conjunction with Philips' medical technologies for disease diagnosis and patient monitoring. In connection with this partnership, Philips made an equity investment in our company. We have also collaborated with a number of pharmaceutical companies, including AstraZeneca, the Mitsubishi Pharma Corporation and two other major pharmaceutical companies, on biomarker research related to important diseases or drug effects. Historically, we have generated revenue from our initiatives, collaborations and biomarker discovery and analysis services agreements with leading pharmaceutical companies and healthcare organizations, under which we analyze preclinical and/or clinical samples to identify biomarkers related to disease mechanisms or drug effects. We believe that these initiatives and collaborations demonstrate our leadership in the establishment of a new healthcare treatment paradigm and position us to capitalize on the development and commercialization of molecular diagnostic products from biomarkers.

Our Strategy

Our objective is to become a leader in discovering, developing and commercializing molecular diagnostic products based on biomarkers. We seek to provide physicians with better information for the diagnosis, treatment and monitoring of disease, which we believe will result in improved patient outcomes and more efficient use of healthcare resources. We plan to leverage our technology platform, initiatives and collaborations to discover and develop new molecular diagnostic tests for clinically and commercially important diseases and treatments. Key elements of our strategy include:

advancing our pipeline of molecular diagnostic product candidates across a range of therapeutic areas;

adopting a multi-pronged approach to the commercialization of our product candidates;

maintaining and expanding our technology advantage;

aligning ourselves with third-party payors, such as health insurance companies, managed care organizations and government health administrative authorities, to encourage the acceptance of our products; and

collaborating with pharmaceutical companies.

Risks Associated with Our Business

Our business is subject to numerous risks, as described more fully in "Risk Factors" immediately following this prospectus summary. These risks include risks related to our business and strategy, our intellectual property, the growth of our management team, workforce and facilities, regulatory approval and other government regulations, and our common stock and this offering. If any of the events or developments described in "Risk Factors" occurs, our business, financial condition or results of operations could be negatively affected, and we may be unable to achieve our business objectives.

Company Information

We were incorporated in Delaware, in February 2000 and later that year chose the name Beyond Genomics, Inc. In October 2004, we changed our name to BG Medicine, Inc. We maintain our operations at 610 Lincoln Street North, Waltham, Massachusetts 02451, and our phone number is (781) 890-1199. Our website address is www.bg-medicine.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

As used in this prospectus, the terms "we," "our," "us," or "the Company" refer to BG Medicine, Inc. and its subsidiary, taken as a whole, unless the context otherwise indicates. "BG Medicine" and the BG Medicine logo are trademarks of BG Medicine, Inc. in the United States, Canada, Europe and Japan. All other trademarks, service marks, trade names, logos and brand names identified in this prospectus are the property of their respective owners.

This prospectus contains market data and industry forecasts that were obtained from industry publications, third-party market research and publicly available information. These publications generally state that the information contained therein has been obtained from sources believed to be reliable, but the accuracy and completeness of such information is not guaranteed. While we believe that the information from these publications is reliable, we have not independently verified, and make no representation as to the accuracy of, such information.

The Offering

Common stock offered by us	4,500,000 shares
Common stock to be outstanding after this offering	19,267,453 shares
Overallotment option	675,000 shares
Use of proceeds	We intend to use the net proceeds of this offering to fund the biomarker discovery, development, regulatory submission and potential launch activities for our molecular diagnostic product candidates; the establishment of commercial and laboratory infrastructure; the establishment of a marketing and distribution effort for our molecular diagnostic product candidates; the repayment of certain debt; and other general corporate purposes. See "Use of Proceeds" on page 29 for a more complete description of our intended use of the proceeds from this offering.
Risk factors	See "Risk Factors" and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock.

Proposed NASDAQ Global Market symbol **BGMD**

The number of shares of common stock to be outstanding after the offering is based on 14,767,453 shares of common stock outstanding as of September 30, 2007. Unless otherwise indicated, the information contained in this prospectus, including the information above, excludes:

3,122,331 shares of common stock issuable upon the exercise of outstanding options as of September 30, 2007, with a weighted average exercise price of \$1.39 per share;

543,731 shares of common stock reserved for future issuance under our 2001 Stock Option and Incentive Plan, or our 2001 Stock Plan, as of September 30, 2007; provided, however, that immediately upon completion of this offering, our 2001 Stock Plan will terminate so that no further awards may be granted under our 2001 Stock Plan;

an aggregate of up to 794,392 shares of common stock reserved for future issuance under our 2007 Employee, Director and Consultant Equity Incentive Plan, or our 2007 Stock Plan, which will become effective upon completion of the offering; plus shares of our common stock that are represented by awards granted under our 2001 Stock Plan that are forfeited, expire or are cancelled without delivery of shares or which result in the return of shares of our common stock to us, following the termination of the 2001 Stock Plan; and

1,224,382 shares of common stock issuable upon the exercise of outstanding warrants as of September 30, 2007, with a weighted average exercise price of \$0.11 per share, which excludes the warrants described below that were automatically exercised subsequent to September 30, 2007 or will automatically exercise prior to the completion of this offering.

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In addition, except where we state otherwise, the information we present in this prospectus:

assumes no exercise of the underwriters' overallotment option to purchase up to an additional 675,000 shares of our common stock;

reflects a 1-for-2.14 reverse split of the outstanding shares of our common stock effected on October 31, 2007 into an aggregate of 4,760,873 shares of our common stock;

reflects the conversion of all of our outstanding preferred stock into 9,723,069 shares of our common stock immediately prior to completion of this offering;

reflects the issuance of 222,220 shares of our common stock upon the automatic conversion of \$2.0 million principal amount of convertible notes issued pursuant to the agreement described below, at the initial public offering price, based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus;

reflects the issuance of 46,261 shares of our common stock in November 2007 upon the net exercise of warrants, and the issuance of 15,030 shares of our common stock upon the automatic net exercise of a warrant immediately prior to the completion of this offering, based on an assumed initial public offering price of \$9.00 per share; and

reflects the effectiveness of our restated certificate of incorporation and restated bylaws upon completion of this offering.

Certain of our existing stockholders and directors, consisting of entities affiliated with Flagship Ventures, or Flagship, with which our director Noubar Afeyan, is affiliated, Gilde Europe Food & Agribusiness Fund B.V., or Gilde, with which our director Pieter van der Meer is affiliated, and Stelios Papadopoulos, have indicated an interest in purchasing shares of our common stock in this offering at the initial public offering price in an amount up to an aggregate of \$8.0 million. Based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, this would consist of an aggregate of up to 888,888 shares of the 4,500,000 shares being offered (excluding the shares covered by the underwriters' overallotment option). Because these indications of interest are not binding agreements or commitments to purchase, these existing stockholders and directors may elect not to purchase any shares in this offering.

On December 27, 2007 we entered into an agreement to issue \$2.0 million aggregate principal amount of convertible notes to entities affiliated with Flagship and to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of our existing lenders. Interest on the notes accrues at the rate of 10% per year. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically convert upon the closing of this offering into that number of shares of our common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, the principal amount of the notes will convert into approximately 222,220 shares of our common stock.

Assuming such purchases and the conversion of the notes at an assumed initial public offering price of \$9.00 per share and based on 19,267,453 shares of common stock outstanding after this offering, Flagship would beneficially own 47.2%, Gilde would beneficially own 14.6%, and Dr. Papadopoulos would beneficially own 6.8%, of our common stock outstanding after this offering. If the actual initial public offering price is less than \$9.00 per share, the preceding beneficial ownership percentages will be higher.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables present our summary consolidated financial data for the periods ended and as of the dates indicated. Our summary consolidated statements of operations data for each of the three years in the period ended December 31, 2006 have been derived from our audited consolidated financial statements and related notes included elsewhere in this prospectus. The consolidated statement of operations data for the nine months ended September 30, 2007 and 2006, and the consolidated balance sheet data as of September 30, 2007 have been derived from our unaudited consolidated financial statements included elsewhere in this prospectus. Our summary consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

The unaudited consolidated balance sheet data is presented on (a) an actual basis; (b) a pro forma basis to reflect (i) the automatic conversion of all shares of our convertible preferred stock outstanding at September 30, 2007 into an aggregate of 9,723,069 shares of our common stock effective immediately prior to the completion of this offering, (ii) the issuance of 46,261 shares of our common stock in November 2007 upon the net exercise of warrants, (iii) the issuance of 15,030 shares of our common stock upon the automatic net exercise of an outstanding warrant immediately prior to the completion of this offering, based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, and (iv) our receipt of \$2.0 million in proceeds from the issuance of convertible notes pursuant to a purchase agreement dated December 27, 2007, and the issuance of 222,220 shares of our common stock upon the automatic conversion of the \$2.0 million principal amount of these notes immediately prior to the completion of this offering, at an assumed initial public offering price of \$9.00 per share; and (c) a pro forma as adjusted basis to reflect the sale of 4,500,000 shares of our common stock in this offering at an assumed initial public offering price of \$9.00 per share and after deducting estimated underwriting discounts and commissions and offering expenses payable by us.

	Nine Months Ended September 30,		Years Ended December 31,		
	2007	2006	2006	2005	2004
	(unaudited)				
	(in thousands, except share and per share data)				

Consolidated Statements of Operations Data:

Revenue	\$ 6,589	\$ 3,341	\$ 6,046	\$ 1,532	\$ 2,520
Operating Expenses:					
Research and development expenses	9,417	5,816	7,788	7,131	8,660
General and administrative expenses	3,033	1,732	2,450	2,412	2,571
Gain on sale of property and equipment	(119)			(307)	(170)
Total operating expenses	12,331	7,548	10,238	9,236	11,061
Loss from operations	(5,742)	(4,207)	(4,192)	(7,704)	(8,541)
Gain on extinguishment of debt				1,035	7,228
Interest income	101	4	24	22	89
Interest expense	(105)	(511)	(574)	(1,585)	(1,463)
Other income					104
Net loss	(5,746)	(4,714)	(4,742)	(8,232)	(2,583)
Dividend on preferred stock					(539)
Amortization of beneficial conversion feature on Series C preferred stock	(203)				
Net loss attributable to common stockholders	\$ (5,949)	\$ (4,714)	\$ (4,742)	\$ (8,232)	\$ (3,122)
	\$ (1.26)	\$ (1.00)	\$ (1.01)	\$ (1.75)	\$ (0.67)

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	Nine Months Ended September 30,		Years Ended December 31,		
Net loss attributable to common stockholders per common share basic and diluted					
Weighted-average common shares outstanding basic and diluted	4,720,836	4,694,519	4,695,285	4,692,561	4,691,299

Consolidated Balance Sheet Data:

	As of September 30, 2007		
	Actual	Pro Forma	Pro Forma As adjusted
	(unaudited)		
	(in thousands)		
Current assets:			
Cash and cash equivalents	\$ 622	\$ 2,622	\$ 37,387
Restricted cash	2,050	2,050	2,050
Restricted short-term investments	3,215	3,215	3,215
Prepaid expenses and other current assets	410	410	410
Total current assets	6,297	8,297	43,062
Property and equipment, net	1,740	1,740	1,740
Deposits and other assets	2,131	2,131	2,131
Total assets	\$ 10,168	\$ 12,168	\$ 46,933
Current liabilities	\$ 12,193	\$ 12,193	\$ 12,193
Long-term liabilities	870	870	870
Redeemable convertible preferred stock	30,870		
Stockholders' equity (deficit)	(33,765)	(895)	33,870
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	\$ 10,168	\$ 12,168	\$ 46,933

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below and all of the other information set forth in this prospectus, including our consolidated financial statements and the related notes, before deciding to invest in our common stock. If any of the events or developments described below occurs, our business, financial condition or results of operations could be negatively affected. In that case, the market price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Business and Strategy

We are an early stage company with a history of losses, we expect to incur losses for at least the next several years, and we may never achieve profitability.

We have incurred substantial net losses since our inception in February 2000 and we expect to incur net losses for at least the next several years. For the years ended December 31, 2006 and 2005, we incurred net losses of \$4.7 million and \$8.2 million, respectively, and for the nine months ended September 30, 2007, we incurred a net loss of \$5.7 million. We expect to continue to incur substantial net losses for at least the next several years. Our accumulated deficit was approximately \$41.9 million at September 30, 2007. In the coming years, we expect to devote substantially all of our resources to the discovery of new biomarkers and to the development and commercialization of our existing molecular diagnostic product candidates and new molecular diagnostic product candidates. We currently generate limited revenue from our biomarker discovery and analysis services agreements. As we continue our development of molecular diagnostic products based on biomarkers, our research and development expenses are expected to increase significantly.

Our business is dependent on our ability to successfully discover and develop novel molecular diagnostic products and services based on biomarkers.

Historically, we have generated revenue from initiatives, collaborations and biomarker discovery and analysis services agreements with leading pharmaceutical companies and healthcare organizations. Apart from these activities, we are investing substantially all of our time and resources in the discovery, development and potential commercialization of novel molecular diagnostic products and services based on biomarkers for our own distribution. The success of our business depends on our ability to develop and commercialize molecular diagnostic products and services based on the candidates that we currently have in our product pipeline, as well as others that we might identify or in-license in the future. We are an early stage company, and we have not yet developed or commercialized any molecular diagnostic product. Based on our experience in biomarker discovery and our knowledge of diagnostic product development from industry sources, we estimate that the overall process will last from two years to three and a half years or longer. We cannot be certain that any of our product candidates will complete the development process, or that we will be able to obtain regulatory clearance or approval where required or desirable or commercialize any products that we develop. If we fail to develop our current product candidates, or we incur delays in commencing commercialization of our first product beyond 2009, we may be unable to generate sufficient revenue to sustain and grow our business, and our business, financial condition and results of operations will be adversely affected.

Few research and development projects result in commercial products, and perceived viability in early clinical trials often is not replicated in later studies. At any point, we may abandon development of a product candidate or we may be required to expend considerable resources repeating clinical trials, which would adversely impact the timing for generating potential revenue from those product candidates.

If we fail to discover and develop molecular diagnostic products at the expected rate, we may be unable to execute our business plan, and our business, financial condition and results of operations may be adversely affected.

Our success depends on our ability to successfully discover biomarkers that will have meaningful commercial value, and develop and commercialize molecular diagnostic products based on these biomarkers. There are considerable risks surrounding the discovery of biomarkers and the development of molecular diagnostic product candidates based on our biomarker discovery efforts. We are an early stage company and we do not have experience in taking biomarker discovery projects through the discovery and development stages. The science and methods that we are employing are innovative and complex, and it is possible that our discovery and development program will yield fewer than expected molecular diagnostic tests for commercialization, or even none at all. Further, our ability to develop and launch molecular diagnostic tests at the rate we currently expect is dependent on our receipt of substantial additional funding either through this offering or other financing transactions. If the yield of our discovery and development program is less than we currently expect, we may be unable to execute our business plan, and our business, financial condition and results of operations may be adversely affected.

If we are unable to execute our commercialization strategy, we may be unable to generate sufficient revenue to sustain our business.

Our business strategy includes commercializing our molecular diagnostic product candidates through the provision of clinical laboratory services, direct product sales and out-licensing of our products. We have no experience to date in conducting these commercial activities. Our success will depend on our ability to establish laboratory operations in compliance with the Clinical Laboratory Improvement Amendments of 1988, or CLIA, manufacture, directly or indirectly, our diagnostic products, establish, directly or indirectly, a sales force for our products, and enter into collaborations with commercial partners for the possible out-license of our technologies. If we are unable to successfully carry out the many operational activities necessary to execute our commercialization strategy, or we incur delays in commencing commercialization of our first product beyond 2009, our business, financial condition and results of operations will be adversely affected.

If the marketplace does not accept the molecular diagnostic products, if any, that we might develop, we may be unable to generate sufficient revenue to sustain and grow our business.

Even if we succeed in developing molecular diagnostic products that we believe will be promising commercial products, and in obtaining regulatory clearance or approval, we may not succeed in achieving significant commercial market acceptance for these products. Our ability to successfully commercialize the molecular diagnostic products that we may develop will depend on numerous factors, including:

whether the medical community accepts that our molecular diagnostic products have sufficient sensitivity and specificity to be meaningful in patient care and treatment decisions;

whether health insurers and other third-party payors will pay for our products; and

whether physicians will be willing to order, and patients will be willing to take, tests which may reveal that a standard-of-care or a promising, new treatment should be discontinued for that patient.

These factors present obstacles to significant commercial acceptance of our potential molecular diagnostic products. If these obstacles arise, we may need to devote substantial time and money in efforts to surmount these obstacles, and we might not be successful. If we fail to successfully commercialize the molecular diagnostic products, if any, that we develop, or we incur delays in

commencing commercialization of our first product beyond 2009, we may be unable to generate sufficient revenue to sustain and grow our business, and our business, financial condition and results of operations may be adversely affected.

Pharmaceutical companies may attempt to discourage broad market acceptance of some of our potential molecular diagnostic products.

Some of the molecular diagnostic products that we intend to develop, if and when commercially available, may reduce, either for efficacy or toxicity reasons, the size of the patient population to which certain innovative but high-cost drug therapies are prescribed. As a consequence, we expect that the pharmaceutical companies that have developed these innovative but high-cost therapies in some cases may seek to resist our commercialization efforts and discourage market acceptance of these diagnostic products. If such resistance occurs and is successful, our efforts to achieve market acceptance of our diagnostic products may be harmed and our business, financial condition and results of operations may be adversely affected.

We are dependent on third parties for the patient samples that are essential to our biomarker discovery and molecular diagnostics product development plans.

To pursue our biomarker discovery and molecular diagnostics product development program, we will need access, over time, to thousands of patient samples, including blood, plasma, urine and other fluids and tissues. We do not have direct access to a supply of patient samples. As a result, we have made arrangements with third parties, such as academic medical centers and Humana that we believe will give us access to a significant number of patient samples over the coming years. Our ability to access existing samples, or recruit patients for new studies, may be adversely affected by changes in privacy laws governing the use and disclosure of medical information. If we fail to secure and maintain an adequate supply of patient samples, or if our existing supply arrangements are terminated or provide access to fewer samples than expected, our ability to pursue our biomarker discovery and molecular diagnostics development efforts could be compromised. If we are unable to pursue these discovery and development efforts owing to the lack of an adequate supply of patient samples, we may be unable to implement our business plan and our business, financial condition and results of operations may be adversely affected.

If we are unable to develop products that keep pace with advances and new developments in the diagnosis and treatment of diseases and other medical conditions, or if we develop products targeted at approved drug therapies that do not remain commercially viable, our ability to grow and sustain our business may be limited.

There have been numerous recent advances in the diagnosis and treatment of diseases and medical disorders, including cardiovascular disease, cancer and central nervous system, or CNS, disorders. The molecular diagnostics product candidates in our product pipeline could become less marketable or even obsolete in the wake of diagnostic or treatment advances that might occur in the future. For example, it is possible that a new drug therapy could be introduced that replaces as the standard of care a drug therapy that is the focus of a product candidate in which we have made a substantial investment. In addition, certain of our product candidates are being designed to predict a patient's response to approved drugs and/or to determine the potential toxicity of those approved drugs in patients. If any of these targeted drugs were not to continue to be commercially viable, for whatever reason, the commercial potential of our related product candidates would be undermined. For example, recent studies have suggested an increased cardiovascular risk in patients using Avandia® (rosiglitazone maleate). This may result in a reduction in sales and, if confirmed, withdrawal of the product from the market. A reduction in sales of Avandia or its withdrawal from the market resulting from these safety concerns would reduce the demand for our diagnostic product candidate based on a biomarker that

could predict a patient's response to Avandia and could have an adverse effect on us. If we are unable to develop products that keep pace with advances and new developments in the diagnosis and treatment of diseases and other medical conditions, or if we develop products targeted at approved drug therapies that do not remain commercially viable, our ability to grow and sustain our business may be limited and our business, financial condition and results of operations may be adversely affected.

We currently generate our revenues by providing biomarker discovery and analysis services to a limited number of companies. If we are unable to sustain or grow our services revenues pending the commercialization of our product candidates, our ability to execute our plans for the discovery, development and commercialization of novel molecular diagnostics could be adversely affected.

We currently generate our revenues from a limited number of companies for whom we provide biomarker discovery and analysis services. In 2006, for example, four of these companies, each representing at least 10% of our total revenue, in the aggregate represented 94% of our total revenue. If these companies curtail or discontinue the services they obtain from us and we are unable to generate new biomarker discovery and analysis services business from other companies pending the commercialization of our product candidates, our revenue could decline and our ability to execute our plans for the discovery, development and commercialization of novel molecular diagnostics could be adversely affected.

We rely on certain suppliers for some of our laboratory instruments and may not be able to find replacements in the event our suppliers no longer supply that equipment.

We rely on certain suppliers for our laboratory instruments and reagents. We rely on mass spectrometry equipment from Applied Biosystems, Waters and Thermo-Fisher to generate the vast majority of data for our biomarker discovery and analysis services projects. We rely on Beckman Coulter to provide the abundant protein removal columns for use with our proteomic mass spectrometer methods and Applied Biosystems for reagents for protein quantification. If we were to lose any of these suppliers, we would have to identify new suppliers with similar instrumentation, reagents and software, capable of supporting our discovery and development efforts based on our proprietary technologies or possibly modify our discovery and development processes and procedures. Even if we were to identify other suppliers, there is no guarantee that we would be able to transfer our technologies to new instruments and equipment or substitute reagents or other materials with comparable results. Moreover, there can be no assurance that we will be able to enter into agreements with such alternate suppliers on a timely basis on acceptable terms, if at all. The loss of any of these suppliers would have a material adverse effect on us.

If our research collaborations and initiatives are unsuccessful or otherwise discontinued, this may hamper our ability to perform our molecular diagnostics product development and commercialization efforts.

We currently have multiple initiatives and collaborations with leading pharmaceutical and medical products companies, healthcare organizations and the Food and Drug Administration, or FDA. These initiatives and collaborations provide us with access to patients and patient samples, sources of biomarkers and intellectual property rights that we intend to use to develop molecular diagnostic products. They also provide sources of revenue and bolster our reputation in the scientific community. For example, through our participation in the HRP initiative, we and other participants in the HRP initiative have unrestricted access to use of the data and the right to practice any inventions arising from the HRP initiative, including development and commercialization of blood biomarkers. If these companies and organizations were to discontinue their participation with us, or if we fail to enter into new collaborations or recruit additional participating companies for these initiatives, we could be forced to discontinue or curtail these initiatives. This may adversely affect our ability to perform our product

candidate development and commercialization efforts, including by limiting our access to patient populations from which we can recruit for future projects.

We expect to face intense competition, often from companies with greater resources and experience than us.

The molecular diagnostics industry is highly competitive and subject to rapid change. The industry continues to expand and evolve as an increasing number of competitors and potential competitors enter the market. We expect many of these competitors and potential competitors to have substantially greater financial, technological, managerial and research and development resources and experience than us. We further expect some of these competitors and potential competitors to have more experience than us in the development of diagnostic products, including validation procedures and regulatory matters. In addition, we expect that our molecular diagnostic products, if successfully developed, will compete with product offerings from competitors, including potentially large and well-established companies, that have greater marketing and sales experience and capabilities than us. If we are unable to compete successfully, we may be unable to grow and sustain our revenue and our business, financial condition and results of operations may be adversely affected.

Our product development efforts for our own initiatives may place us in direct competition with some of our current customers and collaborative partners, which could adversely affect our business, financial condition and results of operations.

We currently provide biomarker discovery and analysis services to pharmaceutical companies and other entities. Such services have generated almost all of our revenue since inception, and will continue to represent a substantial portion of our revenue until such time, if ever, that we commercialize any of our molecular diagnostic tests. Our own efforts to discover biomarkers and to develop molecular diagnostic tests, especially tests for the efficacy of existing drug therapies, may place us into a direct conflict with some of the companies for whom we provide services. Such conflicts of interest could cause these companies to discontinue their use of our services and discourage other companies from seeking out our services. This would have a material adverse effect on our revenue and results of operations. In addition, our initiatives could place us in competition with some of our current collaborative partners who are seeking to develop their own diagnostic or prognostic products. As a result, our collaborators could refuse to continue to collaborate with us or other potential collaborators could be discouraged from entering into arrangements with us, which could adversely affect our business, financial condition and results of operations.

If lower cost drug therapies or low priced diagnostic tests emerge in the marketplace, our ability to successfully commercialize our diagnostic products may be harmed and our business, financial condition and results of operations may be adversely affected.

We expect that the molecular diagnostic tests that we are seeking to develop, if and when commercialized, will frequently be ordered to help physicians assess whether patients should receive innovative but high-cost drug therapies for particular diseases and conditions, and also to help health insurers and other third-party payors decide whether to reimburse the costs of these innovative but high-cost drug therapies. These innovative drug therapies that have been introduced in recent years, and that we expect will continue to be introduced in the coming years, often cost over \$50,000, and sometimes over \$100,000, on a per patient per year basis. In light of the high costs of these innovative drug therapies, we expect health insurers and other third-party payors to be generally willing to reimburse the costs of our molecular diagnostic products, which in some cases may cost more than \$1,000 per test. However, if less expensive drug therapies become available and displace the high-cost therapies as the standard of care for the given diseases or conditions, or if our competitors are able to market lower cost diagnostic tests, the demand for our diagnostic products may decrease. Under such

circumstances, we may be unable to successfully commercialize our products, or we may be forced to sell our products at prices that prevent us from becoming profitable or recovering our investments in these products, and our business, financial condition and results of operations may be adversely affected.

We may need to raise additional capital in the future, and if we are unable to secure adequate funds on terms acceptable to us, we may be unable to execute our business plan and our business, financial condition and results of operations may be adversely affected.

We expect to continue to incur substantial net losses for at least the next several years. We believe that our unrestricted cash and cash equivalents on hand at September 30, 2007, together with revenue produced by our biomarker discovery and analysis services and the expected net proceeds from the offering, will be sufficient to meet our working capital needs through the commercialization of our first product candidate. However, in the event we incur delays in commencing commercialization of our first product beyond 2009, or in the event we encounter a shortfall prior to commercialization, we cannot reasonably estimate the timing or amounts of any additional funding that we may require, due to uncertainties in our two to three and a half year development and commercialization processes and the unknown market response to our products. If we need to raise additional funds in the future, we expect that we would attempt to raise these funds through the issuance of equity or debt, or a combination thereof, in the public or private markets. Such additional financing opportunities may not be available to us, or if available, may not be on favorable terms. The availability of financing opportunities will depend on various factors, such as market conditions and our financial condition and outlook. Any future equity financing would likely result in substantial dilution to our stockholders. If we raise additional funds by issuing debt, we may be subject to limitations on our operations, through debt covenants or other restrictions. If adequate and acceptable financing is not available, we may have to delay or abandon the development or commercialization of certain of our product candidates or license to third parties the rights to commercialize certain of our products candidates or technologies that we would otherwise seek to commercialize ourselves. If funding constraints reduce our ability to successfully execute our business plan, our business, financial condition and results of operations may be adversely affected.

Risks Related to Our Intellectual Property

If the combination of patents, trade secrets and contractual provisions that we rely on to protect our intellectual property proves inadequate, our ability to successfully commercialize our product candidates will be harmed and we may never be able to operate our business profitably.

Our success depends, in large part, on our ability to protect proprietary methods and technologies that we develop under the patent and other intellectual property laws of the United States and other countries, so that we can prevent others from unlawfully using our inventions and proprietary information. We rely on both patents and trade secrets to protect the proprietary aspects of our technology platform. As of November 30, 2007, we have a license to commercialize technology covered by two issued U.S. patents and their foreign counterparts and own or have a license to commercialize technology covered by an additional 16 pending patent applications filed first either with the U.S. Patent and Trademark Office or under the Patent Cooperation Treaty and their foreign counterparts. For our biomarkers and the molecular diagnostic tests we develop based on these biomarkers, we expect to rely on patent protection. We have filed or have rights to a number of patent applications related to our biomarkers, but we do not yet have any issued patents in the United States or Europe on our biomarkers. Moreover, we cannot assure you that any of the pending patent applications will result in issued patents.

The patentability of molecular biomarkers and of test methods and products based on biomarkers is well-established in most countries. However, a detailed interpretation of any specific patent position, including ours, is generally highly uncertain and involves complex legal and factual considerations and has in recent years been the subject of much litigation. The validity, enforceability and commercial value of our patent rights, therefore, are highly uncertain.

In addition, we cannot be certain that we hold the rights to the technology covered by our pending patent applications or to other proprietary technology required for us to commercialize our proposed products. Rights in applications filed by us or our licensors may be affected adversely by patent applications filed by others which have not yet been published. For example, because certain U.S. patent applications are confidential until patents issue, such as applications filed prior to November 29, 2000, or applications filed after this date which will not be filed in foreign countries, third parties may have filed patent applications for technology covered by our pending patent applications without our being aware of those applications, and our patent applications may not have priority over those applications. For this and other reasons, we may be unable to secure desired patent rights, thereby losing desired exclusivity or co-exclusivity. Thus, it is possible that one or more organizations will hold patent rights to which we will need a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we will not be able to market our products.

The terms of our loan and security agreements with our bridge loan lender subject us to the risk of foreclosure on our intellectual property.

On November 9, 2007, we entered into a senior secured bridge loan with Silicon Valley Bank to support general working capital and operations. As collateral to secure our obligations under the bridge loan, we have granted the lender a security interest in all of our assets, including our intellectual property, but excluding our equipment. Furthermore, we must comply with other covenants under the loan and security agreements relating to the bridge loan. The security interest and covenants could impair our ability to enter into collaboration and licensing arrangements. As of November 9, 2007, \$2,000,000 in principal is outstanding under the bridge loan. The bridge loan must be repaid on the earliest of the closing of our initial public offering, our next equity or debt financing or March 31, 2008. We expect to repay the loan with the proceeds of this offering. When the bridge loan is repaid, the lender's security interest on our intellectual property and other assets will be extinguished. If an event of default occurs under the loan and security agreements prior to our repayment of the loan, the lender may exercise its right to foreclose on our assets, including our intellectual property, for the payment of these obligations. Any such default and resulting foreclosure could have a material adverse effect on our business, financial condition and results of operations. When the bridge loan is repaid, the lender's security interest will be extinguished.

If third parties assert that we have infringed their patents and proprietary rights or challenge the validity of our patents and proprietary rights, we may become involved in intellectual property disputes and litigation that would be costly, time consuming, and delay or prevent the development or commercialization of our product candidates.

Our ability to commercialize our product candidates depends on our ability to develop, manufacture, market and sell our product candidates without infringing the proprietary rights of third parties. Third parties may allege that our product candidates or elements of our technology platform infringe their intellectual property rights. Numerous U.S. and foreign patents and pending patent applications, which are owned by third parties, exist in fields that relate to our product candidates and our underlying technology, including patents and patent applications claiming biomarkers, biomarker sets, methods for their discovery, and assay systems and methods designed to exploit them clinically in drug discovery efforts or in selection of patients.

A third party may sue us for infringing its patent rights. Likewise, we may need to resort to litigation to enforce a patent issued or licensed to us or to determine the scope and validity of third-party proprietary rights. In addition, a third party may claim that we have improperly obtained or used its confidential or proprietary information. The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial, and the litigation would divert our management's attention from other aspects of our business. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue our operations.

If we are found to infringe upon intellectual property rights of third parties, we might be forced to pay damages, potentially including treble damages, if we are found to have willfully infringed on such parties' patent rights. In addition to any damages we might have to pay, a court could require us to stop the infringing activity or obtain a license. Any license required under any patent may not be made available on commercially acceptable terms, if at all. In addition, such licenses are likely to be non-exclusive and, therefore, our competitors may have access to the same technology licensed to us. If we fail to obtain a required license and are unable to design around a patent, we may be unable to effectively market some of our technology and products, which could limit our ability to generate revenue or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations. Moreover, we expect that a number of our collaborations will provide that royalties payable to us for licenses to our intellectual property may be offset by amounts paid by our collaborators to third parties who have competing or superior intellectual property positions in the relevant fields, which could result in significant reductions in our revenue from products developed through collaborations.

Many of our employees were previously employed at universities or other biotechnology, pharmaceutical or diagnostic products companies, including our competitors or potential competitors. While we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have inadvertently or otherwise used or disclosed the former employer's intellectual property, trade secrets or other proprietary information. Litigation based on such allegations may be brought against us, and even if we are successful in defending ourselves, we could incur substantial costs and our management could be distracted. If we fail in defending such allegations, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel.

If we are unable to protect our trade secrets, we may be unable to protect our interests in proprietary technology, processes and know-how that is not patentable or for which we have elected not to seek patent protection.

In addition to patented technology, we rely upon unpatented proprietary technology, processes and know-how, including particularly our biomarker discovery platform. In an effort to protect our unpatented proprietary technology, processes and know-how, we require our employees, consultants, collaborators, contract manufacturers and advisors to execute confidentiality agreements. These agreements, however, may not provide us with adequate protection against improper use or disclosure of confidential information, in particular as we are required to make such information available to a larger pool of people as we seek to expand our discovery and development efforts and commercialize our product candidates. These agreements may be breached, and we may not become aware of, or have adequate remedies in the event of, any such breach. In addition, in some situations, these agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants, collaborators, contract manufacturers or advisors have previous employment or consulting relationships. Also, others may independently develop substantially equivalent technology, processes and know-how or otherwise gain access to our trade secrets. If we are unable to protect the confidentiality of our

proprietary technology, processes and know-how, competitors may be able to use this information to develop products that compete with our products, which could adversely impact our business.

If we fail to comply with our obligations in the agreements under which we license development or commercialization rights to products or technology from third parties, we could lose license rights that are important to our business.

Several of our collaboration agreements provide for licenses to us of intellectual property or sharing of rights to intellectual property that is important to our business, and we may enter into additional agreements in the future that provide licenses to us of valuable technology. These licenses impose, and future licenses may impose, various commercialization, milestone and other obligations on us, including the obligation to terminate our use of patented subject matter under certain contingencies. If we fail to comply with these obligations, or in other contingencies, the licensor may have the right to terminate the license even where we are able to achieve a milestone or cure a default after a date specified in an agreement, in which event we would lose valuable rights and our ability to develop our product candidates. We may need to license other intellectual property to commercialize future product candidates. Our business may suffer if any current or future licenses terminate, if the licensors fail to abide by the terms of the license or fail to prevent infringement by third parties, if the licensed patents or other rights are found to be invalid or if we are unable to enter into necessary licenses on acceptable terms.

Risks Related to the Growth of Our Management Team, Workforce and Facilities

Our future success depends on our ability to retain our Chief Executive Officer, our Chief Technology Officer, our Chief Scientific Officer and other key executives and to attract, retain, and motivate qualified personnel.

Our success depends on our ability to attract, retain and motivate highly qualified management and scientific personnel. In particular, we are highly dependent on Pieter Muntendam, our President and Chief Executive Officer; Stephen Martin, our Chief Technology Officer; Robert McBurney, our Chief Scientific Officer; and the other principal members of our executive team. All of the arrangements with the principal members of our executive and scientific teams may be terminated by us or the employee at any time without notice. Although we do not have any reason to believe that we may lose the services of any of these persons in the foreseeable future, the loss of the services of any of these persons might impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining qualified scientific personnel and, in the future, sales and marketing personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among pharmaceutical, biotechnology and diagnostic companies for similar personnel. We also experience competition for the hiring of scientific personnel from universities and research institutions. We do not maintain "key person" insurance on any of our employees. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

We expect to expand our development, clinical research, and marketing capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational, and financial systems, expand our facilities, and continue to recruit and train

additional qualified personnel. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

If our sole laboratory facility becomes damaged or inoperable, our ability to pursue our discovery and development efforts may be jeopardized.

We currently perform all of our biomarker discovery and diagnostic products development work in our laboratories at our headquarters in Waltham, Massachusetts. At the present time, we do not have redundant laboratory facilities. Our facilities could be harmed or rendered inoperable by natural or man-made disasters, including fire, flooding and power outages, which may render it difficult or impossible for us to perform our biomarker discovery and molecular diagnostic testing work for some period of time. Our facilities and the equipment we use to perform our discovery and development work could be costly and time-consuming to repair or replace. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all. If we were to lose our laboratory facilities for any extended period of time, our discovery and development projects could be delayed, and our reputation and relationships with collaborators could be harmed.

In addition to maintaining our laboratory in the United States, we may conduct our testing services in other countries, and the success of our business depends on these laboratories maintaining the required quality of operations and regulatory compliance.

As part of our commercialization plan, we may conduct testing services outside of the United States. As a result of our testing and other work outside of the United States, we will be subject to the standards and requirements imposed by local and national regulatory agencies. We have no experience complying with the regulations imposed by these agencies. Should we fail to meet and maintain regulatory compliance in these regions, we would be incapable of continuing our business operations outside of the United States.

We are, and expect to continue to be, subject to risks associated with international business activities that could harm our financial condition and results of operations.

We have had and continue to have ongoing business arrangements with multiple international partners, including AstraZeneca, the Mitsubishi Pharma Corporation, Philips and other major pharmaceutical companies. The success of our international business activities depends upon a number of factors beyond our control, including:

reduced protection for intellectual property rights in some countries;

export restrictions, trade regulations and foreign tax laws;

fluctuating foreign currency exchange rates;

foreign certification and regulatory requirements;

lengthy payment cycles and difficulty in collecting accounts receivable;

customs clearance and shipping delays; and

political and economic instability.

Failure in our information technology and storage systems could significantly increase turnaround time, otherwise disrupt our operations, or lead to increased competition by other providers of molecular diagnostic services, all of which could adversely impact our development and commercialization efforts.

We use information systems extensively in virtually all aspects of our business, including laboratory testing, data analysis, reporting, client service, logistics, finance and management of medical data. Our ability to execute our business plan depends, in part, on the continued and uninterrupted performance of our information technology systems, or IT systems. IT systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious human acts and natural disasters. Moreover, despite network security measures, some of our servers are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Despite the precautionary measures we have taken to prevent unanticipated problems that could affect our IT systems, sustained or repeated system failures that interrupt our ability to generate and maintain data could adversely affect our reputation and result in a loss of clients and revenue.

If we become subject to product liability claims, we may be required to pay damages that exceed our insurance coverage, and such claims may harm our business in other ways.

Our business exposes us to potential product liability claims that are inherent in the testing, production, marketing and sale of molecular diagnostic products. We will need to obtain product liability insurance for the development and commercialization of our product candidates. We cannot be certain whether we will be able to secure such insurance on commercially reasonable terms, or at all. A product liability claim in excess of any insurance coverage we may obtain would have to be paid out of our cash reserves and could harm our business. In addition, an injunction against one of our product candidates could harm our business.

If we complete our development of any molecular diagnostic tests, the marketing, sale and use of our tests could lead to the filing of product liability claims if someone were to allege that our product failed to perform as it was designed. We may also be subject to liability for errors in the information we provide to clients or for a misunderstanding of, or inappropriate reliance upon, the information we provide. A product liability claim could result in substantial damages and be costly and time consuming for us to defend. We cannot provide assurance that our product liability insurance would protect us from the financial impact of defending a product liability claim. Any product liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any product liability lawsuit could cause injury to our reputation, result in the recall of our product candidates, or cause current collaborators to terminate existing agreements and potential collaborators to seek other partners, any of which could impact our results of operations.

Our activities involve hazardous materials and may subject us to environmental liability or other costs.

Certain activities of our businesses involve the controlled use of limited quantities of hazardous, biological and radioactive materials and may generate biological waste. We are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of these materials and certain waste products. Although we believe that our safety procedures for handling and disposing of these materials comply with prescribed standards, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of an accident or if we otherwise fail to comply with applicable regulations, we could lose our permits and/or approvals or be held liable for damages or penalized with fines. In addition, we do not presently maintain any insurance for claims related to hazardous materials or environmental liability, and our existing resources may be insufficient to cover such liabilities should they arise.

We believe that we comply in all material respects with currently applicable environmental laws and regulations and do not expect near term material additional capital expenditures for environmental control facilities. However, we may have to incur significant costs in the future to comply with environmental laws and regulations.

Risks Related to Regulatory Approval and Other Government Regulations

We may not obtain regulatory approval for our molecular diagnostic product candidates when expected, if at all, and even after obtaining approval, we will be subject to continuing regulation.

To market our products in Europe, we must obtain a CE mark and may, in some cases, need marketing approval from the European Medicines Agency. In the United States, we must obtain clearance, after submitting a 510(k) pre-market notification, or approval, after submitting a pre-market approval application, or PMA, from the FDA before we can commercialize our molecular diagnostic product candidates. Changes in regulatory approval policies or enactment of additional regulatory approval requirements may delay or prevent us from marketing our products. The process of obtaining regulatory clearances or approvals to market medical devices, including in vitro diagnostic test kits, from the FDA or similar regulatory authorities outside of the United States can be costly and time consuming, and there can be no assurance that such clearances or approvals will be granted on a timely basis or at all. Furthermore, each regulatory agency may impose its own requirements and may refuse to grant approval or may require additional data before granting marketing approval even if marketing approval has been granted by other agencies. For example, in seeking clearance from the FDA for our product candidates, we may rely on published test results and conclusions regarding the relationship between certain biomarkers and medical conditions to prove to the FDA that the biomarkers measured by our tests are clinically significant. While we plan to request pre-submission meetings with the FDA and we believe that the FDA has accepted published data in support of other marketing applications, there is no assurance that the FDA will accept the data from the published studies in support of our tests.

Complying with numerous laws and regulations pertaining to our expanding business is an expensive and time-consuming process, and any failure to comply could result in substantial penalties.

The regulatory approval process is expensive and time consuming and the timing of marketing approval is difficult to predict. We have not yet applied for marketing approval for any of our molecular diagnostic product candidates and may lack the necessary experience to efficiently and successfully make such applications. Delay or failure to obtain marketing approval for our molecular diagnostic product candidates could adversely impact our ability to commercialize such product candidates and could substantially impair our ability to generate revenues.

Once we develop diagnostic tests suitable for commercialization, we will be subject to national, regional and local regulations. For example, in the United States, the regulations which we would be subject to include:

the Medicare billing and payment regulations applicable to clinical laboratories;

the federal Medicare and Medicaid Anti-kickback Law, and state anti-kickback prohibitions;

the federal physician self-referral prohibition commonly known as the Stark Law and the state equivalents;

the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA;

the various state laws governing patient privacy;

the Medicare civil money penalty and exclusion requirements; and

the federal civil and criminal False Claims Act.

The risk of our being found in violation of these laws and regulations is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations.

In the future, we may become subject to the Clinical Laboratory Improvement Amendments of 1988, or CLIA, a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. CLIA is intended to ensure the quality and reliability of clinical laboratories in the United States by mandating specific standards in the areas of personnel qualifications, administration, and participation in proficiency testing, patient test management, quality control, quality assurance and inspections. We will need to seek accreditation under CLIA to perform testing. There can be no assurances that we will be able to obtain such accreditation, or if we do, that we would be able to renew it. If we are unable to obtain CLIA accreditation, we may be limited in our ability to perform testing which would limit our revenue and harm our business.

Any action brought against us for violation of these laws or regulations, even if we prevail, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of these laws and regulations, we may be subject to any applicable penalty associated with the violation, including civil and criminal penalties, damages and fines. We could also be required to refund any improperly received payments, and we could be required to curtail or cease our operations. Any of the foregoing consequences could seriously harm our business and our financial results.

Changes in healthcare policy could subject us to additional regulatory requirements that may interrupt possible commercialization of our proposed products and increase our costs.

Healthcare policy has been a subject of extensive discussion in the executive and legislative branches of the federal and many state governments. We developed our commercialization strategy for our technology based on existing healthcare policies. Changes in healthcare policy, such as the creation of broad limits for diagnostic products, could substantially interrupt the sales of future diagnostic tests, increase costs and divert management's attention. We cannot predict what changes, if any, will be proposed or adopted or the effect that such proposals or adoption may have on our business, financial condition and results of operations.

Health insurers and other third-party payors may decide not to cover our diagnostic products or may provide inadequate payment, which could jeopardize our commercial prospects.

In the United States, the regulatory process that allows diagnostic tests to be marketed is independent of any coverage determinations made by third-party payors. For new diagnostic tests, private and government third-party payors decide whether to cover the test, the payment amount for a covered test, and the specific conditions for reimbursement. Physicians are free to order approved diagnostic tests that are not covered by one or more third-party payors, but coverage determinations and payment levels and conditions are critical to the commercial success of a covered healthcare product.

Each third-party payor has its own separate process for making coverage determinations, and, as a result, the coverage determination process is often time-consuming and costly. We intend to develop a strategy to advocate for desired coverage and payment levels which will include aligning ourselves with third-party payors to encourage the acceptance of our products. However, we cannot predict whether third-party payors will cover our tests, or offer adequate payment amounts. We also cannot predict the timing of such decisions.

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If third-party payors decide not to cover our diagnostic tests or if they offer inadequate payment amounts, our ability to generate revenue from our diagnostic tests could be limited. Even if one or more third-party payors decides to reimburse for our tests, a third-party payor may stop or lower payment at any time, which would reduce revenue. In addition, physicians or patients may decide not to order our tests if third-party payments are inadequate, especially if ordering the test could result in financial liability for the patient.

Payment for diagnostic tests furnished to Medicare beneficiaries in most instances is made based on the Clinical Laboratory Fee Schedule. In recent years, Congress had taken steps to reduce payments under the Clinical Laboratory Fee Schedules and could implement further reductions from time to time, which could jeopardize our commercial prospects.

Risks Related to Our Common Stock and this Offering

An active trading market for our common stock may not develop, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for our common stock. We have applied to have our common stock approved for listing on the NASDAQ Global Market. We cannot predict whether and the extent to which an active market for our common stock will develop or be sustained after this offering, or how the development of such a market might affect the market price for our common stock. The initial public offering price will be agreed between us and the underwriters based on a number of factors, including market conditions in effect at the time of the offering, which may not be indicative of future performance. The market price for our common stock may fall below the initial public offering price, and you may not be able to sell your shares at or above the initial public offering price.

Our stock price is likely to be volatile, and the market price of our common stock after this offering may drop below the price you pay.

The market price of our common stock could be subject to significant fluctuations after this offering, and may decline below the initial public offering price. You should consider an investment in our common stock as risky and invest only if you can withstand a significant loss and wide fluctuations in the market value of your investment. Market prices for securities of early stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price. Some of the factors that may cause the market price of our common stock to fluctuate include:

the progress and results of our biomarker discovery and product candidate development efforts;

actions taken by regulatory authorities with respect to our product candidates, or our sales and marketing activities;

our ability to commercialize the products, if any, that we are able to develop;

regulatory developments in the United States, the European Union and other jurisdictions;

changes in the structure of healthcare payment systems;

any actual or threatened intellectual property infringement lawsuit or administrative proceeding involving us;

announcements of technological innovations or new products by us or our competitors;

a market conditions for, or developments affecting, the medical diagnostics, biotechnology or pharmaceutical industries or certain companies within these industries;

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changes in financial estimates or recommendations by securities analysts;

sales of large blocks of our common stock;

sales of our common stock by our executive officers, directors and significant stockholders;

restatements of our financial results and/or material weaknesses in our internal controls;

the loss of any of our key personnel;

publication of research reports about us or the diagnostic products industry by securities or industry analysts;

failure to meet or exceed securities analysts' expectations relating to our financial results;

speculation in the press or investment community generally;

general economic conditions, particularly as they impact consumer spending patterns; and

war, acts of terrorism and other man-made or natural disasters.

The stock markets, and the markets for medical diagnostics, biotechnology and pharmaceutical company stocks in particular, have experienced volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. Investors may not be able to sell when they desire due to insufficient buyer demand and may realize less than, or lose all of, their investment.

In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm our financial condition, operating results and reputation.

The requirements of being a public company will require greater resources, increase our costs and distract our management, and we may be unable to comply with these requirements in a timely or cost-effective manner.

As a public company with equity securities listed on the NASDAQ Global Market, we will need to comply with certain rules, regulations and requirements with which we were not required to comply prior to this offering. Complying with rules, regulations and requirements will require substantial effort on the part of our board of directors and management and will increase our costs and expenses. We will be required to:

institute a more formalized function of internal control over financial reporting;

prepare and distribute periodic and current public reports;

formalize old and establish new internal policies, such as those relating to disclosure controls and procedures and insider trading;

involve and retain to a greater degree outside counsel and accountants in the above activities; and

establish and maintain an investor relations function, including the provision of certain information on our website.

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In addition, as a public company we expect that we will incur higher costs to obtain director and officer liability insurance policies.

The Sarbanes-Oxley Act of 2002 requires, among other things, that we implement and maintain effective internal control for financial reporting and disclosure. In particular, commencing with our

fiscal year ending December 31, 2008, we must begin to perform system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act of 2002. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our common stock could decline and we could be subject to sanctions or investigations by the Securities and Exchange Commission or other regulatory authorities, which would entail expenditure of additional financial and management resources.

The ownership of our common stock will continue to be highly concentrated and your interests may conflict with the interests of our existing stockholders.

Including the participation of certain stockholders and directors in this offering as described below, we anticipate that our executive officers, directors and current holders of more than 5% of our outstanding common stock, together with their affiliates and related persons, will beneficially own or control approximately 71.8% of our outstanding shares after this offering, or approximately 69.6% if the underwriters exercise their overallotment option in full. Certain of our existing stockholders and directors, consisting of entities affiliated with Flagship Ventures, or Flagship, with which our director Noubar Afeyan, is affiliated, Gilde Europe Food & Agribusiness Fund B.V., or Gilde, with which our director Pieter van der Meer is affiliated, and Stelios Papadopoulos, have indicated an interest in purchasing shares of our common stock in this offering at the initial public offering price in an amount up to an aggregate of \$8.0 million. Based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, this would consist of an aggregate of up to 888,888 shares of the 4,500,000 shares being offered (excluding shares covered by the underwriters' overallotment option). The purchase of shares in this offering by these existing stockholders and directors would reduce the public float and may adversely affect the liquidity of the trading market for our common stock from what it otherwise would be if these shares are purchased by unaffiliated investors. Because these indications of interest are not binding agreements or commitments to purchase, these existing stockholders and directors may elect not to purchase any shares in this offering.

On December 27, 2007 we entered into an agreement to issue \$2.0 million aggregate principal amount of convertible notes to entities affiliated with Flagship and to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of our existing lenders. Interest on the notes accrues at the rate of 10% per year. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically convert upon the closing of this offering into that number of shares of our common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, the principal amount of the notes will convert into approximately 222,220 shares of our common stock. The convertible notes were issued in a private placement in accordance with Section 4(2) of the Securities Act of 1933, as amended, and the shares of common stock issued upon the automatic conversion of the notes will be restricted securities. The holders of these notes will be entitled to the registration rights provided in the Third Amended and Restated Investor Rights Agreement, as amended, with regard to the shares of common stock issued upon the automatic conversion of the notes.

Accordingly, these stockholders, if acting as a group, or Flagship, which alone would beneficially own 47.2% of our outstanding common stock based on 19,267,453 shares outstanding after this offering, will have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors and the approval of significant corporate transactions, and they may in some instances exercise this influence in a manner that advances their best interests and not necessarily those of other stockholders. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control, could deprive you of the opportunity to receive a premium for our common stock as part of a sale and could adversely affect the market price of our common stock.

Management will have broad discretion over the use of the net proceeds from the offering and may not apply the net proceeds effectively or in a manner that is consistent with the uses described in this prospectus.

Although we intend to use the net proceeds of this offering to, among other things, finance working capital needs, including the continued development of our galectin-3 molecular diagnostic candidate and other candidates, as well as to fund continuing operations, because of the number and variability of factors that will determine our use of these proceeds, we cannot specify with certainty the particular uses of the net proceeds that we will receive from this offering. We will have broad discretion in the application of the net proceeds, including for any of the purposes described in "Use of Proceeds" on page 29 of this prospectus. However, our plans may change, and we could use the net proceeds in ways with which stockholders do not agree, or for corporate purposes that may not result in a significant or any return on your investment. In addition, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Future issuances or sales, or the possibility of future sales, of a substantial amount of our common stock may depress the price of our common stock.

Future issuances or sales of our common stock, or the perception that such issuances or sales will occur, could cause a decline in the market price of our common stock. Upon completion of this offering, we will have outstanding an aggregate of 19,267,453 shares, consisting of 14,767,453 shares outstanding as of September 30, 2007, the 4,500,000 shares issued in connection with the offering. In connection with the offering, we and our current stockholders, option holders and warrant holders have agreed to certain restrictions on the sale or other disposition of our common stock or securities exchangeable or convertible into, or exercisable for, or repayable with our common stock for a period of at least 180 days from the date of the underwriting agreement, except with the prior written consent of Cowen and Company, LLC and certain other exceptions. We cannot predict whether substantial numbers of our common stock will be sold in the open market following the expiration of the 180-day period, as may be extended. In particular, there can be no assurance that, after this period expires, the current stockholders will not reduce their holdings of our common stock. Future issuances of our common stock could be made by us to expand our product development capabilities, for additional working capital, to fund acquisitions or for other purposes. An issue or sale of a substantial number of our common stock, or the perception that such issuance or sale could occur, could materially and adversely affect the market price of our common stock and could also impede our ability to raise capital through the issuance of equity securities in the future.

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If securities or industry analysts do not publish research or reports about our business, or if they change their recommendations regarding our common stock adversely, the price and trading volume of our common stock could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of the analysts who cover us or our industry make unfavorable comments about our market opportunity or product candidates or downgrade our common stock, the market price of our common stock would likely decline. If one or more of these analysts ceases coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which could cause the market price of our common stock or trading volume to decline.

Investors in this offering will pay a much higher price than the book value of our common stock and therefore you will incur immediate and substantial dilution of your investment.

If you purchase our common stock in this offering, you will pay more for our common stock than the amounts paid by existing stockholders for their shares. You will incur immediate and substantial dilution of \$7.24 per share, based on the assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus. Further, investors purchasing our common stock in this offering will contribute approximately 42.5% of the total amount invested by stockholders since our inception, but will only own approximately 23.4% of the shares of our common stock outstanding. In the past, we also issued options and warrants to acquire our common stock at prices significantly below the initial public offering price. To the extent these outstanding options or warrants are ultimately exercised, you will sustain further dilution.

Because we do not intend to pay dividends for the foreseeable future, investors in the offering will benefit from their investment in shares only if our common stock appreciates in value.

We currently intend to retain our future earnings, if any, to finance the operation and growth of our business and do not expect to pay any dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend upon any future appreciation in their value. There is no guarantee that our common stock will appreciate in value or even maintain the price at which investors in this offering have purchased their shares.

Provisions of our certificate of incorporation, our bylaws and Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove the current members of our board and management.

Certain provisions of our restated certificate of incorporation and restated bylaws that will be in effect upon the completion of this offering could discourage, delay or prevent a merger, acquisition or other change of control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove members of our board of directors. These provisions also could limit the price that investors might be willing to pay in the future for our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. These provisions:

allow the authorized number of directors to be changed only by resolution of our board of directors;

establish a classified board of directors, such that not all members of the board of directors may be elected at one time;

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authorize our board of directors to issue without stockholder approval preferred stock, the rights of which will be determined at the discretion of the board of directors that, if issued, could operate as a "poison pill" to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;

require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;

establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings;

limit who may call stockholder meetings; and

require the approval of the holders of 75% of the outstanding shares of our capital stock entitled to vote in order to amend certain provisions of our restated certificate of incorporation and restated bylaws.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of the voting rights on our common stock, from merging or combining with us for a prescribed period of time.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

the expected timing, progress or success of our research and development and any commercialization efforts, including the productivity and expected success rate of our biomarker discovery platform;

our ability to successfully obtain sufficient supplies of samples for our biomarker discovery and development efforts;

the timing, costs and other limitations involved in obtaining regulatory approval for any of our product candidates;

the potential benefits of our product candidates over current medical practices or other diagnostics;

our ability to market, commercialize and achieve market acceptance for any of our product candidates that we are developing or may develop in the future;

estimates of market sizes and anticipated uses of our product candidates;

our ability to enter into collaboration agreements with respect to our product candidates and the performance of our collaborative partners under such agreements;

our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;

our estimates of future performance, including the expected timing of the launch of our first product; and

our estimates regarding anticipated operating losses, future revenue, expenses, capital requirements and our needs for additional financing.

In some cases, you can identify forward-looking statements by terms such as "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" and similar expressions intended to identify forward-looking statements. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Because of these risks and uncertainties, the forward-looking events and circumstances discussed in this prospectus may not transpire. We discuss many of these risks in this prospectus under the heading "Risk Factors."

Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our estimates and assumptions only as of the date of this document. You should read this document with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we do not undertake any obligation to update or revise any forward-looking statements contained in this prospectus whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$34.8 million, after deducting the estimated underwriting fees and commissions and expenses payable by us, assuming an initial public offering price of \$9.00 per share, the mid-point of the price range set forth on the cover page of this prospectus. If the underwriters' overallotment option is exercised in full, we estimate our net proceeds will be approximately \$40.4 million. We expect to use the net proceeds we receive from this offering primarily for the following purposes:

approximately \$5.0 million to fund assay and clinical development, regulatory submission and potential launch activities for our galectin-3 molecular diagnostic product candidate;

approximately \$5.0 million for the biomarker discovery, development and potential regulatory submission for one additional molecular diagnostic product candidate in 2009;

approximately \$6.0 million for establishing the infrastructure necessary to support the potential launch and commercialization of our molecular diagnostic product candidates and expanding and enhancing our discovery laboratory infrastructure;

approximately \$6.0 million for establishing a marketing and distribution effort for our molecular diagnostic product candidates;

approximately \$2.0 million to repay our senior secured bridge loan with Silicon Valley Bank; and

the remainder for other general corporate purposes, including capital expenditures, repayment of debt and working capital.

We may also use a portion of the net proceeds for the acquisition of, or investment in, technologies, products or companies that complement our business, although we have no current understandings, commitments or agreements to do so.

This expected use of net proceeds of this offering represents our current intentions based upon our present plans and business conditions. The amounts and timing of our actual expenditures depend on numerous factors, including the ongoing status of and results from our current product discovery and development activities, any collaborations we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

We believe the net proceeds from this offering, together with revenue produced by our biomarker discovery and analysis services, our existing cash, cash equivalents and investment balances, and additional financing committed to us will be sufficient to meet our anticipated cash requirements into 2009. If our available cash, cash equivalents and investment balances, together with revenue produced by our biomarker discovery and analysis services, additional financing committed to us and the net proceeds from this offering are insufficient to satisfy our liquidity requirements, we will seek to issue additional equity or debt securities or enter into another credit facility.

Pending use of the net proceeds of this offering, we intend to invest the net proceeds in accordance with our investment policy guidelines, which currently provide for investment of funds in cash equivalents, government obligations, high grade and corporate notes and commercial paper.

DIVIDEND POLICY

We have never declared or paid any dividends on our common stock. We currently intend to retain any future earnings to finance our research and development efforts and the expansion of our business and do not intend to declare or pay cash dividends on our capital stock in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend upon a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant.

CAPITALIZATION

The tables below are derived from our unaudited financial statements as of September 30, 2007, as follows:

on an actual basis;

on a pro forma basis, after giving effect to (i) the automatic conversion of all shares of our convertible preferred stock outstanding at September 30, 2007 into an aggregate of 9,723,069 shares of our common stock effective immediately prior to the completion of this offering, (ii) the issuance of 46,261 shares of our common stock in November 2007 upon the net exercise of warrants, (iii) the issuance of 15,030 shares of our common stock upon the automatic net exercise of an outstanding warrant immediately prior to the completion of this offering, based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, and (iv) our receipt of \$2.0 million in proceeds from the issuance of convertible notes pursuant to a purchase agreement dated December 27, 2007, and the issuance of 222,220 shares of our common stock upon the automatic conversion of the \$2.0 million principal amount of these notes immediately prior to the completion of this offering, at an assumed initial public offering price of \$9.00 per share; and

on a pro forma as adjusted basis, after giving effect to the sale of shares of our common stock offered by us in this offering at an assumed initial public offering price of \$9.00 per share and after deducting estimated underwriting discounts and commissions and offering expenses payable by us.

You should read these tables together with our consolidated financial statements and the related notes thereto, as well as the information under "Management's Discussion and Analysis of Financial Condition and Results of Operations." The tables below are prepared for illustrative purposes only and, because of their nature, may not give a true picture of our financial condition following the offering.

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As of September 30, 2007

	Actual	Pro Forma	Pro Forma As Adjusted
(unaudited)			
(in thousands except share amounts)			
Capitalization			
Unrestricted cash and cash equivalents	\$ 622	\$ 2,622	\$ 37,387
Restricted cash, cash equivalents and short-term investments	5,265	5,265	5,265
Total cash, cash equivalents and short-term investments	\$ 5,887	\$ 7,887	\$ 42,652
Redeemable convertible preferred stock:			
Series A redeemable preferred stock, \$.001 par value; 16,017,067 shares authorized, 15,823,566 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	\$ 23,735	\$	\$
Series A-1 redeemable exchangeable preferred stock, \$.001 par value; 2,475,247 shares authorized, issued and outstanding; actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	5,000		
Series C redeemable preferred stock, \$.001 par value; 1,369,863 shares authorized, issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	2,135		
Stockholders' equity (deficit):			
Series B preferred stock; \$.001 par value; 2,000,000 shares authorized, 1,138,716 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	1,708		
Common stock; \$.001 par value; 100,000,000 shares authorized, actual, 50,000,000 shares authorized, pro forma and pro forma as adjusted, 4,760,873 shares issued and outstanding, actual; 14,767,453 shares issued and outstanding, pro forma; 19,267,453 shares issued and outstanding, pro forma as adjusted;	5	15	19
Unrealized loss	10	10	10
Additional paid-in capital	6,432	41,000	75,761
Retained earnings (accumulated deficit)	(41,920)	(41,920)	(41,920)
Total redeemable convertible preferred stock and stockholders' equity (deficit)	\$ (2,895)	\$ (895)	\$ 33,870
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	\$ 10,168	\$ 12,168	\$ 46,933

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, would increase (decrease) each of additional paid-in capital, total stockholders' equity and total capitalization by approximately \$4.2 million, assuming that the number of shares offered by us under this prospectus remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The as adjusted information discussed above is illustrative only and will adjust based on the actual initial public offering price and other terms of this offering determined at pricing.

The outstanding share information in the capitalization table above is based on the number of shares outstanding as of September 30, 2007, and excludes:

3,122,331 shares of common stock issuable upon the exercise of outstanding options as of September 30, 2007, at a weighted average exercise price of \$1.39 per share;

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543,731 shares of common stock reserved for future issuance under our 2001 Stock Option and Incentive Plan, or our 2001 Stock Plan, as of September 30, 2007; provided, however, that immediately upon completion of this offering, our 2001 Stock Plan will terminate so that no further awards may be granted under our 2001 Stock Plan;

an aggregate of up to 794,392 shares of common stock reserved for future issuance under our 2007 Employee, Director and Consultant Equity Incentive Plan, or our 2007 Stock Plan, which will become effective upon completion of the offering; plus shares of our common stock that are represented by awards granted under our 2001 Stock Plan that are forfeited, expire or are cancelled without delivery of shares or which result in the return of shares of our common stock to us, following the termination of the 2001 Stock Plan; and

1,313,543 shares of common stock issuable upon the exercise of outstanding warrants as of September 30, 2007, at a weighted average exercise price of \$0.32 per share, on an actual basis; and 1,224,382 shares of common stock issuable upon the exercise of outstanding warrants as of September 30, 2007, at a weighted average exercise price of \$0.11 per share, on a pro forma and pro forma as adjusted basis.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price and the net tangible book value per share of our common stock immediately after the completion of this offering. Dilution results from the fact that the initial public offering price is substantially in excess of the book value per share attributable to the existing stockholders for the presently outstanding stock. The information provided below reflects the conversion of all of our outstanding preferred stock into common stock upon completion of this offering and the effect of a 1-for-2.14 reverse split of our common stock on October 31, 2007.

As of September 30, 2007, we had a historical net tangible book value (deficit) of our common stock of \$(33.8 million), or approximately \$(7.09) per share of common stock. Net tangible book value per share represents the amount of our total tangible assets less total liabilities and redeemable convertible preferred stock, divided by 4,760,873, the number of common shares outstanding. Our pro forma net tangible book value (deficit) as of September 30, 2007 was \$(900,000), or \$(0.06) per share of common stock. Pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the number of shares of our common stock outstanding, as of September 30, 2007, after giving effect to the conversion of all of our outstanding preferred stock into 9,723,069 shares of common stock, the issuance of 61,291 shares of our common stock upon the net exercise of certain warrants on or before completion of this offering and the issuance of 222,220 shares of our common stock upon the automatic conversion of \$2.0 million principal amount of convertible notes upon completion of this offering.

After giving effect to the sale by us of shares of our common stock in the offering at the assumed initial public offering price of \$9.00 the mid-point of the price range on the cover page of this prospectus and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our adjusted pro forma net tangible book value as of September 30, 2007 would have been approximately \$33.9 million, or approximately \$1.76 per share. This amount represents an immediate increase in pro forma net tangible book value of \$1.82 per share to our existing stockholders and to the holders of warrants that exercise automatically immediately prior to the completion of this offering based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus and an immediate dilution in pro forma net tangible book value of approximately \$7.24 per share to new investors purchasing shares of our common stock in the offering at the assumed initial public offering price. We determine dilution by subtracting the adjusted pro forma net tangible book value per share after the offering from the amount of cash that a new investor paid for a share of common stock. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$ 9.00
Pro forma net tangible book value as of September 30, 2007	\$ (0.06)
Increase per share attributable to new investors	1.82
	<u>1.76</u>
Adjusted pro forma net tangible book value per share after the offering	1.76
	<u>7.24</u>
Dilution in pro forma net tangible book value per share to new investors	\$ 7.24

The following table summarizes, as of September 30, 2007, the differences between the number of shares purchased from us, the total consideration paid to us and the average price per share that existing stockholders and new investors paid. The table gives effect to the conversion of all of our outstanding preferred stock into common stock and the automatic net exercise of certain warrants and the automatic conversion of notes on or before completion of this offering, as described above.

	Shares Purchased		Total consideration		Average price per share
	Number	Percentage	Amount	Percentage	
Existing stockholders	14,767,453	76.6%	\$ 54,724,947	57.5%	\$ 3.71
New investors	4,500,000	23.4	40,500,000	42.5	9.00
	<u>19,267,453</u>	<u>100.0%</u>	<u>\$ 95,224,947</u>	<u>100.0%</u>	

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A \$1.00 increase (decrease) in the assumed initial public offering price of \$9.00 would increase (decrease) our adjusted pro forma net tangible book value after this offering by \$4.2 million and the pro forma net tangible book value per share after this offering by \$0.22 per share and would increase (decrease) the dilution per share to new investors in this offering by \$0.78 per share, assuming the number of shares offered by us under this prospectus remains the same and after deducting underwriting discounts and commissions and estimated expenses payable by us. The adjusted pro forma information discussed above is illustrative only and will adjust based on the actual initial public offering price and other terms of the offering determined at pricing.

The discussion and tables above assume no exercise of the underwriters' overallotment option. If the underwriters' overallotment option is exercised in full, the number of shares of our common stock held by existing stockholders will be further reduced to 74.1% of the total number of shares of our common stock to be outstanding after the offering, and the number of shares of our common stock held by investors participating in the offering will be further increased to 25.9% of the total number of shares of our common stock to be outstanding after the offering.

In addition, except as noted, the above discussion and table assume no exercise of stock options or warrants after September 30, 2007. As of September 30, 2007, we had outstanding options to purchase a total of 3,122,331 shares of our common stock at a weighted average exercise price of \$1.39 per share and warrants to purchase a total of 1,224,382 shares of our common stock (not including warrants that have or will be automatically exercised immediately prior to the completion of this offering) at a weighted average exercise price of \$0.11 per share. If all such options and warrants had been exercised as of September 30, 2007, adjusted pro forma net tangible book value per share, would be \$1.81 per share and dilution to new investors would be \$7.19 per share.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following table summarizes our selected consolidated financial data for the periods ended and as of the dates indicated. Our selected consolidated statements of operations data for each of the three years in the period ended December 31, 2006 and our selected consolidated balance sheet data as of December 31, 2006, 2005 and 2004 have been derived from our audited consolidated financial statements and related notes included elsewhere in this prospectus. Our selected statement of operations data for each of the two years in the period ended December 31, 2003 and our selected consolidated balance sheet data as of December 31, 2003 and 2002 have been derived from our audited and unaudited consolidated financial statements from 2003 and 2002, respectively, not included in this prospectus. The consolidated statement of operations data for the nine months ended September 30, 2007 and 2006 and the consolidated balance sheet data as of September 30, 2007 have been derived from our unaudited financial statements included elsewhere in this prospectus. Our unaudited interim financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of our management, reflect all adjustments, which include only normal recurring adjustments necessary to present fairly our financial position at September 30, 2007 and 2006 and results of operations for the nine months ended September 30, 2007 and 2006. Our results for the nine months ended September 30, 2007 are not necessarily indicative of the results to be expected for the year ending December 31, 2007 or for any other interim period or for any other future year. Our selected financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and with our consolidated financial statements and related notes included elsewhere in this prospectus.

	Nine Months Ended September 30,		Years Ended December 31,				
	2007	2006	2006	2005	2004	2003	2002
	(unaudited)						(unaudited)

(in thousands, except share and per share data)

**Consolidated
Statements of
Operations Data:**

Revenue	\$ 6,589	\$ 3,341	\$ 6,046	\$ 1,532	\$ 2,520	\$ 1,008	\$ 478
Operating Expenses:							
Research and development expenses	9,417	5,816	7,788	7,131	8,660	10,597	8,500
General and administrative expenses	3,033	1,732	2,450	2,412	2,571	2,430	2,149
Gain on sale of property and equipment	(119)			(307)	(170)		
Total operating expenses	12,331	7,548	10,238	9,236	11,061	13,027	10,649
Loss from operations	(5,742)	(4,207)	(4,192)	(7,704)	(8,541)	(12,019)	(10,171)
Gain on extinguishment of debt				1,035	7,228		
Interest income	101	4	24	22	89	274	411
Interest expense	(105)	(511)	(574)	(1,585)	(1,463)	(1,364)	(615)
Other income					104	290	31
Net loss	\$ (5,746)	\$ (4,714)	\$ (4,742)	\$ (8,232)	\$ (2,583)	\$ (12,819)	\$ (10,344)
Dividend on preferred stock					(539)	(610)	(577)
Amortization of beneficial conversion feature on Series C	(203)						

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	Nine Months Ended September 30,		Years Ended December 31,				
preferred stock							
Net loss attributable to common stockholders	\$ (5,949)	\$ (4,714)	\$ (4,742)	\$ (8,232)	\$ (3,122)	\$ (13,429)	\$ (10,921)
Net loss attributable to common stockholders per common share basic and diluted	\$ (1.26)	\$ (1.00)	\$ (1.01)	\$ (1.75)	\$ (0.67)	\$ (2.87)	\$ (2.33)
Weighted-average common shares outstanding basic and diluted	4,720,836	4,694,519	4,695,285	4,692,561	4,691,299	4,686,535	4,681,368

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	As of December 31,					
	As of September 30, 2007	2006	2005	2004	2003	
	(unaudited)					(unaudited)
(in thousands)						
Consolidated Balance Sheet Data:						
Current assets	\$ 6,297	\$ 4,825	\$ 1,645	\$ 4,855	\$ 10,895	\$ 20,518
Property and equipment, net	1,740	1,274	1,287	1,686	4,801	6,151
Deposits and other assets	2,131	70	171	138	156	20
Total assets	\$ 10,168	\$ 6,169	\$ 3,103	\$ 6,679	\$ 15,852	\$ 26,689
Current liabilities	\$ 12,193	\$ 8,755	\$ 8,364	\$ 8,329	\$ 6,159	\$ 8,503
Long-term liabilities	870	1,163	3,122	4,824	14,419	10,818
Redeemable convertible preferred stock and stockholders' equity (deficit)	(2,895)	(3,749)	(8,383)	(6,474)	(4,726)	7,368
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	\$ 10,168	\$ 6,169	\$ 3,103	\$ 6,679	\$ 15,852	\$ 26,689

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following in conjunction with the "Selected Consolidated Financial Information" and our consolidated financial statements and the related notes thereto that appear elsewhere in this prospectus. In addition to historical information, the following discussion and analysis includes forward-looking information that involves risks, uncertainties and assumptions. Our actual results and the timing of events could differ materially from those anticipated by these forward-looking statements as a result of many factors, including those discussed under "Risk Factors" and elsewhere in this prospectus. See "Special Note Regarding Forward-Looking Statements" included elsewhere in this prospectus.

Overview

We are an early stage life sciences company focused on the discovery, development and commercialization of novel molecular diagnostics based on biomarkers to improve patient outcomes and contain healthcare costs. We are designing our molecular diagnostic tests to predict a patient's response to a drug therapy, determine the potential toxicity of therapeutic agents to patients, identify patients who have or are likely to develop a specific disease, predict a patient's prognosis once a disease has been diagnosed and monitor a patient's disease progression or drug response. Our platform is the discovery engine that enables us to identify new biomarkers by integrating and automating the measurement, analysis, characterization and interpretation of proteins and small non-protein biological molecules, or metabolites, collected from bodily fluids. To date, we have operated in one business segment, collaborative research and development. We have collaborations and initiatives with major pharmaceutical companies, the FDA and other healthcare organizations. We have created a broad pipeline of product candidates that focus on cardiovascular disease, cancer and CNS disorders.

We have incurred substantial losses since our inception in February 2000, and we expect to continue to incur losses for the next several years. For the years ended December 31, 2006, 2005 and 2004, we incurred net losses of \$4.7 million, \$8.2 million and \$2.6 million, respectively. For the nine months ended September 30, 2007 and 2006, we incurred net losses of \$5.7 million and \$4.7 million, respectively.

In the coming years, we expect to devote substantially all of our resources to the discovery of new biomarkers and to the development and commercialization of our existing product candidates and new product candidates. We currently generate limited revenue from our collaborative research and development agreements and biomarker discovery and analysis services agreements. As we continue our development of diagnostic products from biomarkers, our research and development expenses are expected to increase significantly.

In the first quarter of 2007, we announced our LTBS initiative with the FDA and seven major pharmaceutical companies to discover a new biomarker to predict drug-induced human liver toxicity. We also announced that we are leading the HRP initiative for high-risk plaque with Philips, AstraZeneca, Merck and Humana to discover biomarkers for the early detection of coronary artery disease.

In May 2007, we entered into a biomarker product license and collaboration agreement with ACS Biomarker B.V., or ACS Biomarker. ACS Biomarker, a company that was formed with technology exclusively licensed from the University of Maastricht and other parties, was founded to develop and commercialize cardiovascular biomarkers discovered at the Cardiovascular Research Institute Maastricht, or CARIM. Pursuant to the agreement, as supplemented by two licensing addenda entered into in May 2007, ACS Biomarker granted us an exclusive worldwide development and commercial sublicense to two proprietary cardiovascular biomarkers for congestive heart failure, galectin-3 and thrombospondin-2, licensed by it from the University of Maastricht. In addition, we have sublicensed

the rights to certain peptides as a diagnostic biomarker for atherothrombic vascular disease, subject to certain conditions to be met by ACS Biomarker.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial position and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates based on historical experience and make various assumptions which we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A summary of our significant accounting policies is contained in the notes to our audited consolidated financial statements, which are included elsewhere in this prospectus. We consider the following accounting policies to be critical to the understanding of the results of our operations.

Revenue Recognition

Our revenue is currently generated through our initiatives, collaborative research and development agreements and biomarker discovery and analysis services agreements. The terms of these agreements typically include nonrefundable license fees, funding of research and development and payments based upon the achievement of certain milestones.

Revenue under these agreements is recognized, in accordance with the Securities and Exchange Commission's Staff Accounting Bulletin, or SAB No. 104, *Revenue Recognition*, when the following criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred and risk of loss has passed; the seller's price to the buyer is fixed or determinable; and collectability is reasonably assured. Revenue arrangements with multiple elements are recognized under Emerging Issues Task Force, or EITF, Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*.

When we have continuing performance obligations under the terms of a collaborative arrangement, nonrefundable license fees are recognized as revenue over the period in which performance obligations are completed and milestone payments are deferred and recognized as revenue over the term of the arrangement as we complete our performance obligations. Revenue from milestone payments related to arrangements under which no continuing performance obligations exist is recognized upon achievement of the related milestone.

Payments received from biomarker discovery and analysis services agreements are recognized as revenue on a straight-line basis over the term of the arrangement or the expected services period, whichever is longer.

Deferred revenue represents primarily upfront fees, milestone payments or prepayment of services, in each case, where we have continuing performance obligations. Deferred revenue represents amounts received prior to revenue being earned and includes revenue relating to services that are expected to be performed beyond one year.

Stock-Based Compensation

Prior to January 1, 2006, we accounted for employee stock-based compensation arrangements in accordance with the provisions of Statement of Financial Accounting Standards, or SFAS, No. 123, *Accounting for Stock-Based Compensation*, or SFAS No. 123. Under the fair value recognition provisions

of SFAS No. 123, stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the vesting period.

Effective January 1, 2006, we adopted the fair value recognition provisions of SFAS No. 123(R), *Share-Based Payment*, or SFAS No. 123(R), using the modified prospective transition method. Under the modified prospective transition method, compensation cost recognized in the year ended December 31, 2006 included the pro rata compensation cost for all stock-based compensation granted prior to, but not yet vested as of December 31, 2005, based on the grant-date fair value estimated in accordance with the original provisions of SFAS No. 123, and the pro rata compensation cost for all stock-based payments granted on or subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123(R). In accordance with the modified prospective transition method of SFAS No. 123(R), results for prior periods have not been restated. The impact of adopting SFAS No. 123(R) was not material to the net loss or cash flows. For all grants, the amount of stock-based compensation expense has been adjusted for estimated forfeitures of awards for which the requisite service was not expected to be provided. Estimated forfeiture rates are developed based on our analysis of historical forfeiture data. Prior to the adoption of the fair value recognition provisions of SFAS No. 123(R), stock-based payment expense was adjusted for actual forfeitures as they occurred. The cumulative effect of the change in accounting for forfeitures was immaterial.

We account for stock-based compensation issued to non-employees in accordance with SFAS 123(R) and EITF No. 96-18, *Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with, Selling Goods or Services*. We record the expense of such services based on the estimated fair value of the equity instrument using the Black-Scholes option pricing model. The value of the equity instrument is charged to earnings over the term of the service agreement.

For stock-based awards granted to both employees and non-employees, we use the fair value method of calculating stock-based compensation in accordance with SFAS No. 123 for awards prior to January 1, 2006 and SFAS No. 123(R) for awards after December 31, 2005. Calculating the fair value of stock-based awards requires the input of highly subjective assumptions. We use the Black-Scholes option pricing model to value our stock option awards. Stock-based compensation expense is significant to our financial statements and is calculated using our best estimates which involve inherent uncertainties and the application of management's judgment. Significant estimates include the expected life of the stock option, stock price volatility, risk-free interest rate and forfeiture rates.

The expected life represents the weighted-average period that our stock options are expected to be outstanding. The expected life assumption is based on the Staff Accounting Bulletin 107, or SAB 107, simplified method. The SAB 107 provides guidance related to share-based payment transactions with non-employees, and valuation methods including assumptions such as expected volatility and expected term. As we have been operating as a private company since inception with no active market for our stock or traded options, it is not possible to use actual price volatility data. Therefore, we estimated the volatility of our common stock based on the historical volatility of the following public biotechnology and molecular diagnostics companies: Genomic Health, Inc., Myriad Genetics, Inc., Monogram Biosciences, Inc., Digene Corp., Thrombogenics N.V., OncoMethylome Sciences, Epigenomics AG, Galapagos Genomics N.V. and Cepheid. Where these public companies had a stock trading history greater than six years, we utilized their volatility over a period of 6.0 to 6.5 years, which is commensurate with the expected life of our stock options. For the companies which had a stock trading history of less than six years, we calculated their volatility based on the historical price data for the period in which they have been publicly traded. Using an expected volatility based on the average historical volatility of these other entities may result in variability when compared to actual historical volatility once we have a public market for our common stock. We base the risk-free interest rate that we use in the option pricing model on U.S. Treasury zero-coupon issues with terms equal to the

expected lives of the stock options. We have never and do not anticipate paying any cash dividends in the foreseeable future and therefore use an expected dividend yield of zero in the option pricing model. In order to properly attribute compensation expense, we are required to estimate pre-vesting forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We use historical data to estimate pre-vesting forfeitures and record stock-based compensation expense only for those awards that are expected to vest. If the actual forfeiture rate is materially different from the estimate, stock-based compensation expense could be significantly different from what has been recorded. We allocate expense for stock options on a straight-line basis over the requisite vesting period.

There are significant differences among option valuation models, and this may result in a lack of comparability with other companies that use different models, methods and assumptions. If factors change and we employ different assumptions in the application of SFAS No. 123(R) in future periods, or if we decide to use a different valuation model, the stock-based compensation expense that we record in the future under SFAS No. 123(R) may differ significantly from what we have recorded and could materially affect our operating results.

In the absence of a public trading market for our common stock, our board of directors determined the fair market value of our common stock in good faith based upon consideration of a number of relevant factors including:

our stock option grants involved illiquid securities in a private company; prices of our convertible preferred stock issued primarily to outside investors in arms-length transactions, and the rights, preferences and privileges of our preferred stock relative to those of our common stock;

our results of operations, financial status and the status of our research and product development efforts;

our stage of development and business strategy;

the composition of and changes to our management team; and

the likelihood of achieving a liquidity event for the shares of our common stock underlying stock options, such as an initial public offering of our common stock or our sale to a third-party, given prevailing market conditions.

In connection with the preparation of the financial statements required for the filing of this prospectus, we retrospectively analyzed the fair value of our common stock at option grant dates July 19, 2006, December 31, 2006 and April 30, 2007. During 2006, we did not perform a contemporaneous valuation because we deemed it unlikely that an initial public offering would occur in the near term. In April 2007 in anticipation of this offering, we completed a contemporaneous valuation of our common stock. We do not have a policy to retrospectively value the fair value of our common stock for purposes of determining stock compensation expense. However, in November 2007, we determined that certain assumptions used in the previous retrospective and contemporaneous valuations changed significantly and we deemed it appropriate to reassess the fair value of our common stock with respect to December 31, 2006 and April 30, 2007. As part of our retrospective and contemporaneous analysis, the following factors were considered, including business milestone events and financial conditions during 2006 through 2007, research and development activities, the lack of liquidity in our common stock and the increasing likelihood in the pursuit of an initial public offering. In addition, we believe our retrospective valuations at those dates now more fully account for the intrinsic value of our technology platform and more fully recognize the value ascribed by the U.S. public markets to companies such as ours that are developing molecular-based diagnostic products.

Our valuation model used the Market Approach and Income Approach concepts outlined in AICPA Technical Practice Aid titled, Valuation of Privately-Held Company Equity Securities Issued as Compensation, or Practice Aid. We believe that the valuation methodologies used in the retrospective and contemporaneous valuations are consistent with the Practice Aid. We also believe that the preparation of the retrospective valuations was necessary to reassess the fair value of our common stock for financial reporting purposes due to a change in timing that may lead to a potential initial public offering or other liquidity event.

We used the probability-weighted expected return method described in the Practice Aid to determine the fair value of our common stock. Under this method, the value of our common stock is estimated based upon an analysis of future values for our company assuming various future outcomes, the timing of which is based on the plans of our board of directors and management. Share value is based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us as well as the rights of each share class. The fair value of our common stock was estimated using a probability-weighted analysis of the present value of the returns afforded to our stockholders under each of four possible future scenarios.

The four scenarios under this methodology were: (a) become a public company through the completion of an initial public offering during 2007, or the initial public offering scenario; (b) sale or merger at a premium to our liquidation preference of preferred stock, or an optimistic sale scenario; (c) sale or merger below the full liquidation preference of preferred stock, or the sale below full liquidation preference scenario; and (d) stay a private company, or the stay private scenario.

For each of our retrospective and contemporaneous valuations, the selected probability-weighted and future expected enterprise values for the initial public offering and optimistic sale scenarios were based on a Market Approach. In the application of this approach, we considered the Guideline Transaction Method as described in the Practice Aid. We began by analyzing valuations of recent initial public offerings of other comparable molecular diagnostics life science companies. The estimation of present values of our common stock was calculated using assumptions including: the expected enterprise value based on the Market Approach described above; the expected dates of the future initial public offering; and then discounted at an appropriate risk-adjusted discount rate to result in present values. The risk-adjusted discount rate was based on the inherent risk of a hypothetical investment in our common stock. An appropriate rate of return required by a hypothetical investor was determined based on well-established venture capital rates of return published in the Practice Aid for firms engaged in bridge financing in anticipation of a later initial public offering and our calculated cost of capital. Our calculated cost of capital was developed based upon a quantitative and qualitative analysis of factors that would impact the discount rate. If different discount rates had been used, the valuations would have been different.

In applying the Market Approach in the optimistic sale scenario, we analyzed recent guideline transactions of molecular diagnostics life science companies. Our selected transaction enterprise value was supported by published transaction values of companies with biomarker candidates in similar stages of development to ours. Finally, in applying the Market Approach in the sale below full liquidation preference scenario, we applied a transaction enterprise value assuming a sale of our existing research and intellectual property at a value that would not allow the preferred stockholders to realize their full liquidation value. Under the sale below full liquidation preference scenario, no proceeds would be available to distribute to our common stockholders.

For each of our retrospective and contemporaneous valuations, the stay private scenario was determined using the Income Approach by applying appropriate discount rates to estimated cash flows based on our projection of revenue and costs. Key assumptions associated with the Income Approach include: projected cash flows, which reflect our best estimates of our future operations; a terminal

value, which attributes value to cash flows for the years beyond the projection period; and a discount rate, which reflects the nature of the company and the risks associated with the business.

The discount for marketability applied only in the stay private scenario was based upon a number of empirical studies, IRS Revenue Ruling 77-287 involving the issue of discounts for lack of marketability and certain other company specific factors, such as the prospects for liquidity absent an initial public offering and estimated volatility of our common stock, and the application of an option pricing model utilizing the value of a put option. A discount for lack of marketability of 25% in the July 19, 2006 retrospective valuation, 0% in the December 31, 2006 retrospective valuation, and 0% in the April 30, 2007 retrospective valuation was applied to arrive at the fair value of our common stock only in the stay private scenario. If a different discount for lack of marketability was used at each respective valuation date, the valuation results would have been different.

Finally, the present value calculated for our common stock under each scenario was then probability-weighted based on our estimate of the relative occurrence of each scenario. The estimated fair value of our common stock at each valuation date is equal to the sum of the probability-weighted present values for each scenario.

We used a 10% probability weighting for the initial public offering scenario in our July 19, 2006 retrospective valuation and we increased this percentage in each valuation going forward to reflect the increased probability of a public offering as significant business milestones were achieved, including the HRP initiative with Merck, AstraZeneca, Philips and Humana, approval of our initial phase biomarker discovery project for LTBS under our Collaborative Research and Development Agreement, or CRADA, with the FDA, our sublicense to two proprietary cardiovascular biomarkers for congestive heart failure with ACS Biomarker, B.V., a strategic collaboration agreement with Humana, and increased discussions with investment bankers regarding a public offering. In general, the closer a company gets to an initial public offering, the higher the probability assessment weighting is for the public company scenario. In our case, the probability weighting assigned to the initial public offering scenario in the retrospective valuations increased from 55% at December 31, 2006 to 80% at April 30, 2007.

In addition to the initial public offering scenario, we considered the possibility of the optimistic sale within a similar timeline adjusted for the timeline to complete a sale process, and at a similar enterprise value as an initial public offering. As a result, the combined initial public offering and optimistic sale probability weightings as of the July 19, 2006, December 31, 2006 and April 30, 2007 retrospective valuation dates were 20%, 80% and 90%, respectively.

The retrospective fair values of our common stock increased throughout 2006, reducing the difference between the fair value of our common stock and the estimated initial public offering price range. The increase in fair value was attributed to business and operating milestones and our proximity to a potential initial public offering, and the engagement of investment bankers. The retrospective fair value of our common stock on July 19, 2006 was determined to be \$1.37 per share. The fair value of our common stock on that date contemplated the following:

As of the July 19, 2006 valuation date, we used a probability of 10% for the initial public offering scenario, 10% for the optimistic sale scenario, 40% for sale below full liquidation preference scenario, and 40% for the stay private scenario. The 10% probability of an initial public offering was based on our revenue level as of the valuation date and the need to continue to grow our revenue and enter into additional partnerships.

The timelines to potential liquidity events ranged from approximately 18 to 30 months.

The need for additional funding in order to sustain operations.

Risks related to entering into additional partnerships for further biomarker development.

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The future proceeds were discounted at rate of return of 35% for the optimistic sale and initial public offering scenarios and 40% the stay private scenario.

Discount for lack of marketability of 25% was applied only to the stay private scenario.

The retrospective fair value of our common stock on December 31, 2006 was determined to be \$8.50 per share. The fair value of our common stock on that date contemplated the following:

As of the December 31, 2006 valuation date, we used a probability of 55% for the initial public offering scenario, 25% for the optimistic sale scenario, 10% for sale below full liquidation preference scenario, and 10% for the stay private scenario. The increased probability from 10% to 55% of an initial public offering was based on our revenue level as of the valuation date and meetings with investment bankers to discuss the potential for an initial public offering.

The timeline to complete the initial public offering of 12 months and the optimistic sale of 18 months.

We entered into participation agreements for the HRP initiative with Merck and AstraZeneca.

A reduction in the risk adjusted discount rate of 25% for the optimistic sale and initial public offering scenarios and 30% for the stay private scenario.

A reduction in the discount for lack of marketability from 25% to 0% was applied only to the stay private scenario.

We completed a contemporaneous fair value of our common stock as of April 30, 2007, which was determined to be \$8.77 per share. In November 2007, we completed a retrospective valuation of the fair value of our common stock as of April 30, 2007, which was determined to be \$12.60 per share. The fair value of our common stock on that date contemplated the following:

In January 2007, Philips became the third participant in the HRP initiative and we publicly announced the HRP initiative.

In January 2007, under our CRADA with the FDA, we received approval of our initial phase biomarker discovery project for the LTBS for which we are collaborating with the FDA.

In January 2007, we entered into negotiations for a biomarker product license and collaboration agreement with ACS Biomarker B.V. for two proprietary cardiovascular biomarkers for congestive heart failure.

In February 2007, we were in negotiations with Humana to establish a strategic partnership to collaborate on the development and validation of biomarkers.

In March 2007, we held an organizational meeting for this offering.

As a result of negotiating the partnership with Humana and engaging investment bankers to assist us in the process of an initial public offering, the likelihood of a short term liquidity event increased significantly. Consequently, we estimated a 70% probability of experiencing either a public offering or a sale at a premium in 2007.

The timeline to complete an initial public offering of three months and a sale at a premium of 12 months.

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A risk adjusted discount rate of 25% represented our cost of capital.

We did not apply a discount for lack of marketability.

We have incorporated the fair values calculated in the contemporaneous and retrospective valuations into the Black-Scholes option pricing model when calculating the stock-based compensation expense to be recognized for the stock options granted. The retrospective valuations generated per share fair values of common stock of \$1.37 at July 19, 2006, \$8.50 at December 31, 2006 and \$12.60 at April 30, 2007. We have not granted options during the period of June 8, 2007 through the date of this prospectus.

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The following table summarizes options grants from October 1, 2006 through September 30, 2007:

Grant Date	Option Granted	Exercise Price	Fair Value of Underlying Stock at Grant Date	Intrinsic Value at Grant Date
November 28, 2006	233,644	\$ 0.54	\$ 7.49	\$ 6.95
December 18, 2006	9,344	\$ 0.54	\$ 8.50	\$ 7.96
February 15, 2007	4,672	\$ 0.54	\$ 10.38	\$ 9.84
March 20, 2007	16,354	\$ 0.54	\$ 10.91	\$ 10.37
April 27, 2007	310,744	\$ 8.77	\$ 12.16	\$ 3.39
June 8, 2007	14,952	\$ 8.77	\$ 12.60	\$ 3.83
Total	589,710			

The aggregate intrinsic value on the date of grant of options included in the above table is \$3.0 million.

Valuation models require the input of highly subjective assumptions. Because our privately held common stock has characteristics significantly different from that of publicly traded common stock and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable, single measure of the fair value of our common stock. The foregoing valuation methodologies are not the only valuation methodologies available and will not be used to value our common stock following completion of this offering. We cannot make assurances of any particular valuation of our common stock. Accordingly, investors are cautioned not to place undue reliance on the foregoing valuation methodologies as an indicator of future stock prices.

Material Factors Affecting our Results of Operations and Financial Condition

We believe that the factors described in the following paragraphs have had and are expected to continue to have a material effect on our operational results and financial condition.

Revenue

Our revenue is generated through our initiatives, collaborative research and development agreements and biomarker discovery and analysis services agreements. The terms of our collaborative research and development agreements typically include nonrefundable license fees, funding of research and development and payments based upon the achievement of certain milestones. The services we provide include the analysis of preclinical and/or clinical samples to identify biomarkers related to disease mechanisms or drug effects. In some cases, we have retained rights to the biomarkers identified in the course of these agreements. Our revenue currently tends to be concentrated, with assignments from a limited number of large customers generating a significant percentage of revenue in any given year.

Upon successful development and commercialization of any of our molecular diagnostic product candidates, we will begin to generate revenue from sales of these products. For some of our diagnostic tests, we plan to perform services at our own certified laboratories or at contract laboratories. In other cases, we plan to sell our molecular diagnostic tests to physicians, hospitals and commercial laboratories. We also plan to generate revenue by licensing our technology to third parties for development of a finished product. In the future, we expect that our revenue from collaborations will decline as a percentage of total revenue.

Operating Expenses

Research and development expenses

It is our policy to expend the major portion of our resources to conduct our research and development activities. We incur research and development expenses in connection with our internal biomarker discovery efforts. We also incur a significant portion of our research and development expenses in connection with our initiatives, collaborative research and development agreements and biomarker discovery and analysis services agreements. Typically these agreements allow us to retain some rights to the intellectual property developed during the projects. Additionally, we have invested in software and various platforms to perform the collaborative research and biomarker discovery and analysis services. Because we have not undertaken the research and development activities exclusively for our own purposes, we do not identify separately the amounts spent on each type of activity.

Our research and development expenses consist primarily of direct personnel costs, fees for consultants and outside services, laboratory consumables and overhead expenses. We use consultants and outside services to provide expertise or services which we do not have. We anticipate that research and development expenses will increase significantly, primarily due to our increased biomarker discovery and development efforts. We also expect that our research and development expenses will increase in connection with our initiatives, collaborative research and development agreements and biomarker discovery and analysis services agreements, partially offset by revenue generated under these agreements.

General and administrative expenses

General and administrative expenses consist primarily of salaries and other personnel-related expenses, professional fees, such as legal, auditing and tax, non-cash compensation related to stock-based awards and occupancy expenses.

We expect that our general and administrative expenses will increase significantly as we hire additional personnel necessary for further growth of our company. We expect that general and administrative expense will also increase in connection with the listing of our common stock on the NASDAQ Global Market due to increased regulatory, legal and accounting expenses associated with being a public company.

Results of Operations

Nine Months Ended September 30, 2007 and 2006

Revenue

Revenue increased by 100%, or \$3.3 million, from \$3.3 million in the nine months ended September 30, 2006 to \$6.6 million in the nine months ended September 30, 2007, primarily due to the increased number of active projects under our partnerships and collaborations. During the nine months ended September 30, 2007, we recognized revenue from four ongoing studies with various major pharmaceutical companies, the LTBS initiative and the HRP initiative, compared to the nine months ended September 30, 2006, when we recognized revenue from one ongoing study with a major pharmaceutical company, a study with Boehringer Ingelheim to identify a biomarker for drug-induced organ toxicity and a study with The Global Alliance for TB Drug Development to identify biomarkers of tuberculosis drug efficacy.

Operating expenses

	Nine Months Ended September 30,		Change	
	2007	2006	\$	%
	(unaudited) (dollars in thousands)			
Research and development expenses	\$ 9,417	\$ 5,816	\$ 3,601	62%
General and administrative expenses	3,033	1,732	1,301	75
Gain on sale of property and equipment	(119)		(119)	
Total operating expenses	\$ 12,331	\$ 7,548	\$ 4,783	63%

Research and development expenses. Research and development expenses increased by 62%, or \$3.6 million, from the nine months ended September 30, 2006 to the nine months ended September 30, 2007. Personnel and personnel-related costs increased by \$549,000 as we added additional personnel to work on the HRP initiative and the new research projects for pharmaceutical companies. The costs of consultants and outside services increased by \$1.8 million, as we increased our research and development activities on product candidates and increased our use of outside services to complete the additional revenue producing projects. Non-cash compensation charges increased by \$743,000 as a result of the increase in fair value relative to non-employee options. See "Management's Discussion and Analysis Critical Accounting Policies and Estimates Stock-Based Compensation."

We expect our research and development expenses in 2008 to increase at a greater rate than for the first nine months of 2007 as we increase our product development efforts and establish a facility at the Philips High Tech Campus in Eindhoven, the Netherlands.

General and administrative expenses. General and administrative expenses increased by 75%, or \$1.3 million, from the nine months ended September 30, 2006 to the nine months ended September 30, 2007. Personnel and personnel-related costs increased \$370,000 as a result of hiring additional personnel to prepare for an initial public offering. Non-cash compensation charges increased by \$595,000 as a result of the increase in fair value relative to non-employee options. See "Management's Discussion and Analysis Critical Accounting Policies and Estimates Stock-Based Compensation." In addition, legal expenses increased by \$157,000 as we continued to develop agreements to support our HRP and LTBS initiatives.

We expect our general and administrative expenses in 2008 to increase over 2007 as we develop our sales and marketing functions, grow our general administrative functions commensurate with the growth of our business, and incur additional administrative expenses as a result of becoming a public company.

Gain on sale of property and equipment. Gain on sale of property and equipment was \$119,000, in the nine months ended September 30, 2007 compared to \$0 in the nine months ended September 30, 2006 due to sales of underutilized laboratory equipment in 2007. In 2007, we sold excess laboratory equipment with a net book value of \$110,000 and received proceeds of \$229,000.

Other

Interest income and expense. Interest income for the nine months ended September 30, 2007 increased by \$97,000, to \$101,000, from \$4,000 in the nine months ended September 30, 2006 as a result of an increase in average cash available for investment due to the July 2006 sale of Series A-1 preferred stock and the May 2007 sale of Series C preferred stock. Interest expense for the nine months ended September 30, 2007 decreased by 79%, or \$406,000, to \$105,000 from \$511,000 in the

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nine months ended September 30, 2006 due to a decrease in indebtedness resulting primarily from the July 2006 conversion of promissory notes into Series A preferred stock.

Dividend on preferred stock. The Company accounts for beneficial conversion features under Emerging Issues Task Force (EITF) Issue No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios* and EITF Issue No. 00-27, *Application of Issue 98-5 to Certain Convertible Instruments*. At the time of the issuance of Series C redeemable convertible preferred stock, the common stock into which the redeemable convertible preferred stock is convertible had a fair value greater than the effective conversion price of the redeemable convertible preferred stock. The difference between the effective conversion price and the fair value of the common shares into which the preferred stock was convertible at the commitment date resulted in a beneficial conversion feature of approximately \$3,068,000. The beneficial conversion feature was recorded as a decrease to the convertible preferred stock and an increase to additional paid in capital. The amortization of the beneficial conversion was computed using the effective yield method and was recorded as a dividend to preferred stock of \$203,000.

Years Ended December 31, 2006 and 2005

Revenue

Revenue increased by 300%, or \$4.5 million, from \$1.5 million in 2005 to \$6.0 million in 2006, primarily due to the increased number of projects completed under our partnerships and collaborations. During 2006, we recognized revenue from three completed projects, one ongoing study and one new study, compared to 2005, when we only recognized revenue from our ongoing study for a major pharmaceutical company. One of our completed projects in 2006, for AstraZeneca, was for molecular profiling of clinical samples, including endogenous metabolites, lipids and proteins. In 2006, we completed projects for the Global Alliance for Tuberculosis Drug Development and Boehringer Ingelheim, continued our study for a major pharmaceutical company and initiated our HRP initiative. In 2006, four of our customers, each representing at least 10% of our revenue, in the aggregate represented 94% of our revenue. In 2005, one customer represented 100% of our revenue.

Operating expenses

	Year Ended December 31,		Change	
	2006	2005	\$	%
	(dollars in thousands)			
Research and development expenses	\$ 7,788	\$ 7,131	\$ 657	9%
General and administrative expenses	2,450	2,412	38	1
Gain on sale of property and equipment		(307)	307	100
	\$ 10,238	\$ 9,236	\$ 1,002	11%

Research and development expenses. Research and development expenses increased by 9%, or \$657,000, from 2005 to 2006. Personnel and personnel-related costs increased by \$663,000 as we hired three additional employees to handle increased project activity. Travel and entertainment expenses increased by \$113,000 due to travel related to the HRP and LTBS initiatives. These increases were partially offset by a decrease in depreciation expense of \$374,000 due to certain assets reaching the end of their depreciable lives.

General and administrative expenses. General and administrative expenses increased by \$38,000, from 2005 to 2006. Personnel and personnel-related costs decreased by \$133,000 as we reduced our staff by one. Incremental non-cash compensation charges increased by \$123,000 related to accounting for the cost of employee stock options as required under an accounting principle we adopted in 2006.

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See "Management's Discussion and Analysis Critical Accounting Policies and Estimates Stock-Based Compensation." Costs associated with consulting and outside services increased by \$14,000 and our legal costs increased by \$30,000 as we began to develop agreements to support our HRP and LTBS initiatives.

Gain on sale of property and equipment. Gain on sale of property and equipment was \$0 in 2006 compared to \$307,000 in 2005 due to the absence of any sales of underutilized laboratory equipment in 2006. In 2005, we sold excess laboratory and computer equipment with a net book value of \$58,000 and received proceeds of \$365,000.

Other

Gain on extinguishment of debt. Gain on the extinguishment of debt decreased from \$1.0 million in 2005 to \$0 in 2006, due to the absence of any extinguishment of any promissory notes in 2006. In 2005, we settled indebtedness with a carrying value of \$2.0 million for a cash payment of \$1.0 million.

Interest income and expense. Interest income increased by 9%, or \$2,000, from \$22,000 in 2005 to \$24,000 in 2006, due to the increase in average cash available for investment due to the July 2006 sale of Series A-1 preferred stock. Interest expense decreased by 63%, or \$1.0 million, from \$1.6 million in 2005 to \$0.6 million in 2006, due to a decrease in indebtedness resulting primarily from the July 2006 conversion of promissory notes into Series A preferred stock.

Years Ended December 31, 2005 and 2004

Revenue

Revenue decreased by 40%, or \$1.0 million, from \$2.5 million in 2004 to \$1.5 million in 2005, primarily due to completion of specific milestones under our collaboration agreements. All of our revenue in 2005 resulted from our ongoing study with a major pharmaceutical company. During 2004, we recognized revenue from the completion of four projects, including our study for AstraZeneca, and our ongoing study for another major pharmaceutical company. In 2005, one customer represented 100% of our revenue. In 2004, three of our customers, each representing at least 10% of our revenue, in the aggregate represented 91% of our revenue.

Operating expenses

	Year Ended December 31,		Change	
	2005	2004	\$	%
	(dollars in thousands)			
Research and development expenses	\$ 7,131	\$ 8,660	\$ (1,529)	(18)%
General and administrative expenses	2,412	2,571	(159)	(6)
Gain on sale of property and equipment	(307)	(170)	(137)	(81)
	\$ 9,236	\$ 11,061	\$ (1,825)	(16)%

Research and development expenses. Research and development expenses decreased by 18% or \$1.5 million from 2004 to 2005. Fees for outside consultants and services decreased by \$569,000 as our research volume decreased. Because a significant portion of our laboratory and other equipment was fully depreciated by 2004, depreciation expense decreased by \$638,000 in 2005.

General and administrative expenses. General and administrative expenses decreased by 6%, or approximately \$159,000, from 2004 to 2005. Personnel-related costs decreased by \$199,000 and non-cash compensation expense decreased by \$33,000. Fees for consultants and outside services increased by \$75,000 resulting from our need to staff our collaborations entered into in 2005.

Gain on sale of property and equipment. Gain on sale of property and equipment increased by 81% or \$137,000 from 2004 to 2005 due to the greater sales of underutilized laboratory and computer equipment. In 2004 and 2005, we sold excess laboratory and computer equipment with a net book value of \$239,000 and \$58,000, respectively, and received proceeds of \$409,000 and \$365,000, respectively.

Other

Gain on extinguishment of debt. Gain on the extinguishment of debt decreased by 86.1%, from \$7.2 million in 2004 to \$1.0 million in 2005 due to a reduction in the aggregate principal amount and interest of promissory notes extinguished. In 2004 we settled indebtedness with a carrying value of \$9.7 million for a cash payment of \$500,000 and the issuance of a \$2.0 million promissory note. In 2005, we settled indebtedness with a carrying value of \$2.0 million for a cash payment of \$1.0 million.

Interest income and expense. Interest income decreased by 75%, or \$67,000, from \$89,000 in 2004 to \$22,000 in 2005, due to the decrease in average cash available for investment. Interest expense increased by 7%, or \$100,000, from \$1.5 million in 2004 to \$1.6 million in 2005, due to an increase in indebtedness resulting from the issuance of convertible promissory notes.

Liquidity and Capital Resources

Our primary sources of liquidity have been funds generated from our equity financings, which have included the sale of shares of our common stock and preferred stock, debt financings, which have included the sale of convertible notes that have since been converted into shares of our preferred stock, and cash payments from our research and development collaborations and service agreements.

Convertible Notes and Warrants

In 2004, 2005 and 2006, we issued convertible promissory notes to certain of our stockholders and related parties in the aggregate principal amounts of \$4.5 million, \$3.0 million and \$1.6 million, respectively. Specifically, during the period October 2004 to March 2005, we issued to Flagship Ventures and its affiliates, Gilde Europe Food & Agribusiness Fund B.V. and Stelios Papadopoulos, three of our principal stockholders, an aggregate principal amount of \$5,500,000 in convertible promissory notes. In connection with the issuance of these notes, we issued warrants to purchase 856,695 shares of our common stock at an exercise price of \$0.02 per share that expire 10 years from the issue date. In August 2005, the holders of these notes converted them into an aggregate of 3,919,358 shares of our Series A preferred stock at a price of \$1.50 per share.

During the period September 2005 to July 2006, we issued to Flagship Ventures and its affiliates, Gilde Europe Food & Agribusiness Fund B.V., Stelios Papadopoulos and Pieter Muntendam, our President and Chief Executive Officer, an aggregate principal amount of \$3,550,000 in convertible promissory notes. In connection with the issuance of these notes, we issued warrants to purchase 331,753 shares of our common stock at an exercise price of \$0.02 per share that expire 10 years from the issue date. In July 2006, the holders of these notes converted them into an aggregate of 2,509,866 shares of our Series A preferred stock at a price of \$1.50 per share.

Upon the closing of this offering, the shares of Series A preferred stock that were issued upon conversion of the notes described above will be converted into 3,004,305 shares of our common stock. The warrants will remain outstanding. See "Description of Capital Stock Warrants." Under the terms of the agreements among our stockholders described below, Flagship and Gilde Europe Food & Agribusiness Fund B.V. each have the right to designate one member to our board of directors. Noubar Afeyan, Ph.D., the managing partner of Flagship Ventures, is the current member of our board of directors designated by Flagship. Pieter van der Meer, General Manager of Gilde Healthcare Partners, is the current member of our board of directors designated by Gilde Europe Food & Agribusiness

Fund B.V. The rights of Flagship and Gilde Europe Food & Agribusiness Fund B.V. to designate these directors will terminate immediately prior to completion of this offering.

On December 27, 2007 we entered into an agreement to issue \$2.0 million aggregate principal amount in convertible notes to entities affiliated with Flagship Ventures, with which our director, Noubar Afeyan, is affiliated, and to Gilde Europe Food & Agribusiness Fund B.V., with which our director, Pieter van der Meer is affiliated. Of the total amount, \$1.4 million will be issued to Flagship and \$600,000 will be issued to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of our existing lenders. Interest on the notes accrues at the rate of 10% per year. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically convert upon the closing of this offering into that number of shares of our common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, the principal amount of the notes will convert into approximately 222,220 shares of our common stock.

Series A-1 Preferred Stock

In July 2006, we issued to Koninklijke Philips Electronics N.V., one of our principal stockholders, 2,475,247 shares of our Series A-1 preferred stock at a price of \$2.02 per share for aggregate gross proceeds of \$5 million. Upon the closing of this offering, these shares will be converted into 1,156,657 shares of our common stock.

Series C Preferred Stock

In May 2007, we issued to Humana Inc. 1,369,863 shares of our Series C preferred stock at a price of \$3.65 per share for aggregate gross proceeds of \$5 million. Upon the closing of this offering, these shares will be converted into 640,122 shares of our common stock.

Capital Lease Credit Line

In December 2006, we established a line of credit for capital leases with GE Capital Corp., or GE Capital, in the aggregate amount of \$1.1 million to enable us to purchase laboratory and computer equipment. The credit line is secured by a lien on all of our equipment. The funding period of the credit line was November 2006 through October 2007. The interest rate for the line of credit is calculated by adding the fixed rate of 6.51% to the base four-year treasury rate that is current at the time when we draw upon the line of credit. We first drew down \$507,000 on March 23, 2007 at an interest rate of 10.95% with a 48-month repayment term. We subsequently drew down \$301,000 on June 22, 2007 at an interest rate of 11.54% and \$229,000 on September 28, 2007 at an interest rate of 10.78%, each with a 48-month repayment term. We did not draw down the remaining balance of approximately \$63,000 prior to the expiration date in October 2007.

Bridge Loan

On November 9, 2007, we entered into a senior secured bridge loan with Silicon Valley Bank to support general working capital and operations. We drew down an initial tranche of \$2,000,000 on November 9, 2007 and we may draw down a second tranche of \$1,000,000 on or after February 1, 2008, subject to Silicon Valley Bank's approval. Both tranches will bear a fixed interest rate of 10.25% with a repayment date on the earliest of the closing of our initial public offering, our next equity or debt financing or March 31, 2008. The bridge loan is secured by all of our assets, including our intellectual property, but excluding our equipment. In connection with our initial draw down under the bridge loan, we issued a warrant to purchase 25,608 shares of our common stock at an exercise price of \$7.81 per

share; this warrant will be converted into a warrant to purchase our preferred stock at the applicable preferred stock price in the event we complete a preferred stock equity financing prior to the closing of our initial public offering. We will be required to issue an additional warrant to Silicon Valley Bank in the event we draw down the second tranche for a number of shares equal to 10% of the second tranche loan amount divided by the exercise price then in effect for the initial warrant. The second warrant will be exercisable for the same class of securities as the initial warrant and will be exercisable for the same exercise price. Each warrant will be exercisable for a period of 10 years from the date of issuance.

Investor Agreement

On September 30, 2007, we entered into an agreement with our stockholders affiliated with Flagship Ventures and with our stockholders Gilde Europe Food & Agribusiness Fund, B.V. and Stelios Papadopoulos. Pursuant to this agreement, these stockholders agreed to provide us with an aggregate of up to \$3 million to be used for our working capital needs through March 31, 2008. Any funds provided to us under this agreement will be evidenced by a series of promissory notes issued to these stockholders in the principal amounts requested by us, and will be due on June 30, 2008 and, if not repaid on that date, upon demand. Any such notes will be issued on current market terms. We plan to use a portion of the net proceeds from this offering to repay any amounts loaned by our stockholders under this agreement and the corresponding promissory notes.

Net Cash Used

In 2004, we had negative cash flows from operating activities of \$7.9 million. Net cash flows from investing activities were \$3.4 million. Net cash flows from financing activities were \$1.8 million, including proceeds from the issuance of convertible notes, partially offset by a restructuring payment and repayment of capital leases and equipment notes. As a result, we had negative cash flows in 2004 of \$2.7 million.

In 2005, we had negative cash flows from operating activities of \$4.2 million. Proceeds from the sale of property and equipment and the sale of short-term investments, offset by purchases of property and equipment, resulted in cash flows from investing activities of \$622,000. Net cash flows from financing activities were \$1.0 million, including proceeds from the issuance of convertible notes, partially offset by a restructuring payment and repayment of capital leases and equipment notes. As a result, we had negative cash flows in 2005 of \$2.6 million.

In 2006, we had negative cash flows from operating activities of \$4.4 million. As a result of purchases of property and equipment, we had negative cash flows from investing activities of \$642,000. Net cash flows from financing activities were \$4.9 million, including proceeds from the issuance of our Series A-1 preferred stock and convertible notes, offset by repayment of capital leases and equipment notes. As a result, we had negative cash flows in 2006 of \$138,000.

For the nine months ended September 30, 2006, we had negative cash flows from operating activities of \$2.2 million. Purchases of property and equipment resulted in cash used in investing activities of \$83,000. Net cash flows from financing activities were \$5.4 million, including proceeds from issuance of Series A-1 redeemable convertible preferred stock and the issuance of convertible notes, partially offset by repayment of capital leases and equipment notes. As a result, we had positive cash flows for the nine months ended September 30, 2006 of \$3.1 million.

For the nine months ended September 30, 2007, we had negative cash flows from operating activities of \$1.5 million. Customer receipts increased by \$2.1 million, payables increased by \$3.4 million and stock-based compensation was \$1.5 million, further offsetting the \$5.7 million loss for the nine months ended September 30, 2007. Purchases of property and equipment and short-term investments resulted in cash used in investing activities of \$3.7 million. Net cash flows from financing activities were

\$4.7 million, including proceeds from the issuance of Series C redeemable preferred stock and from the issuance of promissory notes to GE Capital, partially offset by repayment of capital leases and equipment notes. As a result, we had negative cash flows for the nine months ended September 30, 2007 of \$388,000.

As of September 30, 2007, we had unrestricted cash and cash equivalents of approximately \$622,000. We had restricted cash and short-term investments of approximately \$5.2 million, consisting of cash received under the HRP initiative. This amount is used solely to fund the efforts under this strategic alliance.

Funding Requirements

To date, we have not commercialized any products and have not achieved profitability. We anticipate that we will continue to incur substantial net losses for the next several years as we further develop and prepare for the commercial launch of our products, develop the corporate infrastructure required to sell our products and operate as a publicly traded company.

We have not generated any product revenue since our inception and do not expect to generate any revenue from the sale of products before 2009. We believe the net proceeds from this offering, together with revenue produced by our biomarker discovery and analysis services, our existing cash, cash equivalents and investment balances, and additional financing committed to us will be sufficient to meet our anticipated cash requirements into 2009. If our available cash, cash equivalents and investment balances, together with revenue produced by our biomarker discovery and analysis services, additional financing committed to us and the net proceeds from this offering are insufficient to satisfy our liquidity requirements, we will seek to sell additional equity or debt securities or enter into another credit facility. The sale of additional equity may result in dilution to our stockholders. If we raise additional funds through the issuance of debt securities, these securities may have rights senior to those of our common stock and may contain covenants that would restrict our operations. We may require additional capital beyond our currently anticipated projections. Any such required additional capital may not be available on reasonable terms, if at all. If we are unable to obtain additional financing, we may be required to reduce the scope of, delay, or eliminate some or all of, our planned research, development and commercialization activities, which could materially harm our business.

Our forecast of the period of time through which our financial resources will be adequate to support our operations, the costs to complete development of products and the cost to commercialize our future products are forward-looking statements and involve risks and uncertainties, and actual results could vary materially and negatively as a result of a number of factors, including the factors discussed in the "Risk Factors" and "Special Notes Regarding Forward-Looking Statements" sections of this prospectus. We have based these estimates on assumptions that may prove to be incorrect, and we could utilize our available capital resources sooner than we currently expect. Our future liquidity and capital funding requirements will depend on numerous factors, including:

the rate of progress and cost of our commercialization activities;

the success of our research and development efforts;

the expenses we incur in marketing and selling our products;

the revenue generated by sales of our future products;

the emergence of competing or complementary products;

the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; and

the terms and timing of any collaborative, licensing or other arrangements that we have or may establish.

Contractual Obligations

The following table sets forth our payment obligations as of December 31, 2006 under contracts that provide for fixed and determinable payments over the periods indicated.

	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
(in thousands)					
Capital leases	\$ 419	\$ 340	\$ 79		
Operating leases	766	494	272		
Equipment notes payable	915	915			
Contract services	750	750			
License fees	550	300	250		
Total	\$ 3,400	\$ 2,799	\$ 601	\$	\$

We lease approximately 22,000 square feet of office and laboratory space, with a term expiring in June 2008, and an option to renew until June 2009. In December 2007, we exercised our option to extend the lease until June 2009. We have equipment notes for laboratory and computer equipment payable during 2007. We have contracted outside services during 2007. We pay technology access and licensing fees. On November 9, 2007, we drew down \$2,000,000 under a senior secured credit bridge loan, which is due no later than March 31, 2008, with Silicon Valley Bank to support general working capital and operations as described above. The table does not include any possible royalties payable under certain of our license agreements. We believe that we are reasonably likely to make such payments in the future, although the amounts and timing are not currently determinable. We believe that our facilities are adequate to meet our current needs, although if additional space is needed in the future, we believe that such space will be available on commercially reasonable terms.

We will require additional property, plant and equipment to accommodate our anticipated growth. We may choose to lease or directly purchase such property, plant and equipment depending upon the nature of the purchase, the current lease rate and our cash position.

Off Balance Sheet Arrangements

We do not have any off balance sheet arrangements.

Qualitative and Quantitative Disclosures About Market Risk

Our exposure to market risk is limited to our cash, cash equivalents and short-term investments which have maturities of less than one year as well as changes in foreign currency exchange rates as measured against the dollar. The goals of our investment policy are preservation of capital, fulfillment of liquidity needs and fiduciary control of cash and investments. We also seek to maximize income from our investments without assuming significant risk. To achieve our goals, we maintain a portfolio of cash equivalents and investments in a variety of securities of high credit quality. The securities in our investment portfolio are not leveraged, are classified as available for sale and are, due to their short-term nature, subject to minimal interest rate risk. We currently do not hedge interest rate exposure. Because of the short-term maturities of our investments, we do not believe that an increase in market rates would have a material negative impact on the value of our investment portfolio.

Our exposure to foreign currency exchange rates is the result of certain of our suppliers being paid in foreign currencies. We do not currently hedge our foreign currency exposure. A hypothetical 10% change in exchange rates would not materially change our operating results. We may choose to enter into foreign exchange or options contracts in an efforts to minimize our economic exposure to such changes in the future.

Recent Accounting Pronouncements

In June 2006, the Financial Accounting Standards Board, or FASB, issued FASB Interpretation No. 48, or FIN 48, *Accounting for Uncertainty in Income Taxes* an interpretation of FASB Statement No. 109. This interpretation addresses the recognition and measurement of tax positions to be reported on an entity's tax return as they relate to the positions being taken on the financial statements. FIN 48 is effective for financial statements issued for fiscal periods beginning after December 15, 2006. The adoption of FIN 48 did not have a material impact on our financial position and results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, or SFAS No. 157. SFAS No. 157 provides guidance for using fair value to measure assets and liabilities. It establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS No. 157 is effective for financial statements issued for the first interim period after November 15, 2007 or January 1, 2008. We are currently evaluating the impact the adoption of SFAS No. 157 will have on our financial position and results of operations.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS No. 159. The purpose of the statement is to expand the use of fair value measurement and thus decrease the occurrence of measuring assets and liabilities differently. SFAS No. 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007. We are currently evaluating the impact the adoption of SFAS No. 159 will have on our financial position and results of operations.

In June 2007, the EITF issued EITF Issue 07-03, *Accounting for Advance Payments for Goods or Services to Be Used in Future Research and Development*, or EITF 07-03. EITF 07-03 addresses the diversity which exists with respect to the accounting for the non-refundable portion of a payment made by a research and development entity for future research and development activities. Under this EITF, an entity would defer and capitalize non-refundable advance payments made for research and development activities until the related goods are delivered or the related services are performed. EITF 07-03 is effective for fiscal years beginning after December 15, 2007 and interim periods within those years. We do not expect that the adoption of EITF 07-03 will have a material impact on our financial position.

BUSINESS

Overview

We are an early stage life sciences company focused on the discovery, development and commercialization of novel molecular diagnostics based on biomarkers to improve patient outcomes and contain healthcare costs. We discover biomarkers and are developing molecular diagnostic tests based on biomarkers that are intended to provide information to physicians that will improve patient treatment decisions. We are designing our molecular diagnostic tests to predict a patient's response to a drug therapy, determine the potential toxicity of therapeutic agents to patients, identify patients who have or are likely to develop a specific disease, predict a patient's prognosis once a disease has been diagnosed or monitor a patient's disease progression or drug response. We discover biomarkers and are developing our product candidates using our proprietary, versatile, scalable technology platform. Our platform is the discovery engine that enables us to identify new biomarkers by integrating and automating the measurement, analysis, characterization and interpretation of proteins and small non-protein biological molecules, or metabolites, collected from bodily fluids. With our robust technology platform, we believe that we are well-positioned to rapidly and cost-effectively discover new high-value biomarkers and develop molecular diagnostic tests based on these biomarkers over a broad range of therapeutic categories that promise to be highly correlated to clinical outcomes. We have validated our technology platform over five years of extensive collaborative research. We have collaborations and initiatives with major pharmaceutical companies, the Food and Drug Administration, or FDA, and other healthcare organizations. We currently have no products approved or available for sale and, to date, the revenues we have generated do not come from product sales. Subject to the completion of development activities and clearance from the FDA, we expect to introduce our first molecular diagnostic product in 2009.

We have created a broad pipeline of product candidates that focus on cardiovascular disease, cancer and central nervous system, or CNS, disorders. Our lead molecular diagnostic product candidate is based on a biomarker for congestive heart failure, or CHF, which is a condition in which the heart cannot pump enough blood to the rest of the body. CHF affects an estimated 5 million people in the United States and we believe a similar number in Europe. Based on the results of two independent prospective studies, we believe that measurements of two proteins found in plasma, called NT-proBNP and galectin-3, have clinical utility as a predictor for survival in both acute and stable CHF. We plan to leverage the data from these studies to develop a molecular diagnostic test for determining the severity and prognosis of patients with CHF by measuring the plasma levels of galectin-3 alone and in combination with NT-proBNP. Subject to completion of various development activities, we intend to seek regulatory clearance from the FDA in the fourth quarter of 2008, and pending clearance by the FDA, expect to introduce a molecular diagnostic test based on the galectin-3 biomarker in the United States in 2009. Our other lead product candidates are molecular diagnostic tests based on biomarkers that may be used to detect asymptomatic coronary artery stenosis, or narrowing of the arteries leading to the heart, as well as biomarkers in people with atherothrombotic cardiovascular disease, commonly known as vulnerable plaque, that identify patients at the highest risk for heart attack or stroke within two to three years. In December 2007, we launched a large-scale clinical study of up to 7,300 participants which may support regulatory filings for our vulnerable plaque product candidate and some of our other cardiovascular product candidates.

In addition to these molecular diagnostic product candidates in development, we are also leveraging our technology platform, initiatives and collaborations to discover new biomarkers. Based on the capacity of our technology platform and our experience to date in biomarker discovery, we believe that we can develop and launch up to four new molecular diagnostic tests per year. Some of our other product candidates that we expect to advance rapidly are based on programs we began recently to discover biomarkers for predicting and monitoring the response of cancer patients to treatment with Herceptin® (trastuzumab) or Avastin® (bevacizumab). We believe that our technology platform will

enable us to maintain a broad product pipeline and thus diversify our product development risk. In addition, we expect our products to have shorter development times and less onerous regulatory requirements than are typical for therapeutic products. As a result, we believe that our product development strategy will allow us to benefit from current healthcare trends with a lower risk approach than a therapeutically focused biotechnology company.

A changing healthcare treatment paradigm is emerging in which individualized diagnostic information will play an increasingly important role in improving patient care and containing rapidly growing healthcare costs. In recent years, many innovative, high-cost therapies have become available, including drugs that cost in excess of \$50,000 per patient annually. However, many of these therapies are effective only in a minority of the patients for whom they are prescribed. Physicians currently have limited tools to identify patients for whom a drug will be effective or safety may be a concern. We are designing our molecular diagnostic product candidates to provide medical professionals with information that facilitates prescribing the right drugs for the right patients at the right time. Health insurance companies are showing an increased willingness to pay for molecular diagnostic tests that promise to contain healthcare costs. As a result, molecular diagnostics is the fastest growing category within the overall *in vitro* diagnostics market. According to a report published by Kalorama Information, Inc., a division of MarketResearch.com, the field of molecular diagnostics is expected to grow in the seven largest markets around the world from nearly \$18 billion in sales in 2006 to \$92 billion in 2016, which represents a 17.7% compound annual growth rate, or CAGR.

We have built a proprietary technology platform to discover novel biomarkers that we use to generate new product candidates. Our approach involves the integrated analysis of thousands of precise measurements of proteins, metabolites and nucleic acids. Our technology platform allows us to pursue the most promising commercial opportunities because it is not constrained by biology or specimen type. Moreover, the flexibility of our platform allows us to develop tests that use easily obtainable biological samples, such as blood and urine. We have secured access to clinical samples for biomarker discovery and diagnostic test validation from collaborators. For example, we have established a partnership with Humana Inc., or Humana, a health insurance company, to enable cost-effective biomarker validation studies among its membership. Our high throughput platform is automated and highly scalable, with capacity, in its current configuration, for 16 to 20 new discovery projects per year. We are able to complete the discovery stage and determine whether to move forward with a particular project within approximately 120 days, on average, after receiving samples. This minimizes costs and enables us to focus solely on projects with higher probabilities of success. Based on our experience to date, at our current capacity, we believe that we will be able to develop and launch up to four new high-value molecular diagnostic tests per year.

The strength of our technology platform has been validated through our multiple initiatives, collaborations and biomarker discovery and analysis services agreements with leading pharmaceutical companies and healthcare organizations. In February 2007, we announced a collaboration with the FDA and seven pharmaceutical companies in one of the projects under the FDA's Critical Path Initiative, called LTBS, or liver toxicity biomarker study, to discover a new biomarker to predict drug-induced human liver toxicity. Because liver toxicity is one of the leading causes of drug failure in clinical trials, a biomarker for liver toxicity could significantly reduce drug failure rates in clinical trials and consequently improve pharmaceutical research and development productivity. In January 2007, we announced that we are leading the HRP initiative for high-risk plaque with Philips Medical Systems Nederland B.V., or Philips, AstraZeneca AB, or AstraZeneca, Merck & Co., Inc., or Merck, and Humana to discover biomarkers for the early detection of coronary artery disease. Last year we entered into a strategic partnership with Philips to discover biomarkers for use in conjunction with Philips' medical technologies for disease diagnosis and patient monitoring. In connection with this partnership, Philips made an equity investment in our company. We have also collaborated with a number of pharmaceutical companies, such as AstraZeneca and the Mitsubishi Pharma Corporation, on biomarker

research related to important diseases or drug effects. Historically, we have generated revenue from our initiatives, collaborations and biomarker discovery and analysis services agreements with leading pharmaceutical companies and healthcare organizations, under which we analyze preclinical and/or clinical samples to identify biomarkers related to disease mechanisms or drug effects. We believe that these initiatives and collaborations demonstrate our leadership in the establishment of a new healthcare treatment paradigm and position us to capitalize on the development and commercialization of molecular diagnostic products from biomarkers.

History

We were incorporated in Delaware in February 2000. Our founders include Dr. Noubar Afeyan, our Chairman of the Board, and Dr. Jan van der Greef, Professor of Analytical Biosciences at Leiden University and Scientific Director of Systems Biology Research at the Netherlands Organization for Applied Scientific Research, or TNO. Our company was created to explore potential applications of systems biology in drug discovery and development and focused initially on developing the new measurement tools and sophisticated data analysis techniques that have become the foundation of our technology platform in biomarker discovery. We have conducted studies based on our founders' vision that the behavior of biological systems is too complex to predict based on genomic results alone and that in many cases one would also need to determine the actual biological state by measuring proteins and metabolites. In 2004, we hired Pieter Muntendam, our President and Chief Executive Officer. Since inception we have raised approximately \$52.1 million from investors, including entities affiliated with Flagship Ventures, Elan Corporation, Gilde Healthcare Partners, Philips, Waters Technologies and Humana.

Industry Overview

The *in vitro* diagnostics, or IVD, industry focuses on developing products used to evaluate and analyze biological specimens derived from bodily fluids, such as blood, plasma, urine, cells and other substances taken from patients. The information generated may be used to diagnose disease, monitor and guide therapy, assist in managing chronic disease and assess patient status during admission and discharge. Over the last decade, the clinically routine testing segment of the global IVD market has matured and experienced only modest growth, with a CAGR of 5% to 6%, reaching an estimated \$22.9 billion in 2005, according to an article published in August 2006 in Nature Biotechnology. Concurrently, an emerging, high-value segment of the IVD market, known as molecular diagnostics, has captured the attention and research and development efforts of the industry's leading companies. According to the Kalorama report, the molecular diagnostics segment of this market, including a variety of laboratory tests, such as consumer diagnostics (over-the-counter, at-home tests), clinical research, biomarker discovery/testing and novel molecular analyses, was approximately \$18 billion in 2006 and is projected to exceed \$92 billion in the seven major markets by 2016, a CAGR of 17.7%. Within this expanding market segment, molecular diagnostics that provide predictive drug response and safety information is expected to increase from 17.5% of the current market potential to approximately 66%, or over \$60 billion of the market potential by 2016. As such, we believe tests that can help physicians make more informed therapeutic decisions for each individual patient will increasingly offer a significant business opportunity. This is an area of significant emphasis in our product development efforts.

Molecular diagnostics relies on the analysis of biological processes at the molecular level by utilizing biomarkers. A biomarker is one or more characteristics that are objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes or pharmacological responses to a therapeutic intervention. Since biomarkers correlate with an underlying process within the body, tests to measure these biomarkers can be used effectively to inform physicians on treatment decisions. Utilizing our proprietary technology platform, which integrates proteomic, metabolomic,

genomic and clinical information, we are focused on discovering these biomarkers for the development of high-value molecular diagnostics.

A key driver in the growth of molecular diagnostics was the mapping of the human genome as part of the Human Genome Project, which provided a better understanding of the genetic variances that influence diseases. Genetic variances remain important indicators in the diagnosis and treatment of diseases. However, while analyzing DNA can provide information about a patient's genome, this genetic information can only be used to determine an individual's predisposition, or susceptibility, to a disease or to respond to drug treatment. For example, it cannot provide any information as to whether an individual is actually suffering from a disease or responding to a drug treatment. Ribonucleic acid, or RNA, if appropriate cells or tissues are available, provides information about the synthesis of proteins which can indicate whether an individual has a disease or is responding to a drug treatment. However, RNA analysis can be misleading since it often does not accurately reflect the level of a protein in a cell, for example, because differing rates of protein turnover can be governed by the activity of other proteins.

Although genomic information is of great value, neither an individual's genome nor data on gene expression can provide direct information about the exact protein species or metabolite that is serving a normal bodily function, contributing to a pathological state or involved in the response to a drug treatment. As a result, the predisposition of a particular person to develop certain diseases and the impact of drugs on that person is often significantly influenced by the proteins and metabolites that are present in the human body and affect cell activity. We believe that the behavior of biological systems is too complex to predict based on genomic results alone and that in many cases one would also need to determine the actual biological state by measuring proteins and metabolites.

Proteomic and metabolomic measurements can provide direct information about the concentrations, and changes in the concentrations, of proteins and metabolites in bodily tissues, cells and, most importantly, in bodily fluids. Unlike genomic tests which require samples from affected cells and tissues, protein and metabolite biomarkers can be sourced from bodily fluids, including blood plasma and urine, which are more easily obtainable. For example, proteomics and metabolomics technologies can be applied to a blood sample from which all cells have been removed to reveal its protein and metabolite composition, including the sometimes very important chemical modifications that have been made to the protein after it was first generated as a result of the protein decoding process. It is possible to gather significant information about a disease process or drug response and, moreover, to create a simple blood-based diagnostic test from the proteomic and metabolomic information derived from a blood sample.

These molecular diagnostic tests can be used to answer a number of important treatment questions and include the following types of tests:

Drug Response predict treatment response before initiation of therapy or predict treatment outcome early in the course of therapy;

Drug Safety predict toxicity and side effects before initiation of therapy or detect such effects before signs or symptoms appear;

Disease Diagnostics identify the presence of disease, either before or after the appearance of signs or symptoms;

Disease Prognostics predict the likely future course of a disease; and

Patient Monitoring determine the progression of a disease and whether or not a patient is responding to therapy.

Our current molecular diagnostic product candidates include examples of each of these types of tests.

Limitations of the Current Healthcare Treatment Paradigm

Physicians currently have limited information to enable individualized treatment decisions for patients. Consequently, the current treatment paradigm is based on a trial-and-error approach to find the most suitable drug for an individual patient. This approach does not usually account for biological variability between patients, which often has a significant impact on how each patient responds to a particular drug. We believe a significant number of drugs across many therapeutic areas are currently being prescribed to patients who will not realize the full intended therapeutic benefit or who will experience side effects associated with the treatment. It often takes months for patients to exhibit evidence of inappropriate drug therapy and, as such, physicians may be unaware of the need to change their treatment regimen. When superior alternatives exist, prolonged treatment with sub-optimal or poorly tolerated therapy results in inferior patient outcomes and increases healthcare costs. We believe that molecular diagnostic tests based on biomarkers can provide information to help physicians choose the right drug for the right patient at the right time.

The current healthcare treatment paradigm poses a significant economic burden on the healthcare system. Third-party payors, including health insurance companies, managed care organizations and government health administrative authorities, currently cover drugs that are considered effective, on average, for a general population of patients but may be less effective, or even harmful, for individual patients. The healthcare cost burden is expected to grow significantly. As we believe our collaboration with Humana suggests, there is increasing interest in using diagnostics in clinical decisions that may provide drug efficacy information toward individualizing therapy. In addition, a combination of providers, government regulators including the FDA, patient advocacy groups, and most importantly, patients, are increasing pressure on the healthcare industry to develop cost effective, individualized drug regimens driven by targeted molecular diagnostics to improve treatment outcomes and ease the rising costs of healthcare. The escalating cost of healthcare has become an important social, economic and political issue in the United States, Europe and throughout the world.

We believe that the ability to deliver targeted or individualized therapies will increase the competitive advantage for pharmaceutical and biotechnology companies that adopt this approach. In addition, we believe drug development companies may be able to use molecular diagnostics and validated biomarkers to improve development productivity, reduce or even avoid costly trials and create products with better efficacy and side-effect profiles. Moreover, through its Critical Path Initiative, the FDA is focused on individualized medicine and continues to issue statements and guidance designed to encourage the development of molecular diagnostics and targeted drug candidates based on validated biomarker data.

Our Strategy

Our objective is to become a leader in discovering, developing and commercializing molecular diagnostic tests based on biomarkers. We seek to provide physicians with better information for the diagnosis, treatment and monitoring of disease, which we believe will result in improved patient outcomes and more efficient use of healthcare resources. We plan to leverage our technology platform, initiatives and collaborations to discover and develop new molecular diagnostic tests for clinically and commercially important diseases and treatments. Key elements of our strategy include:

Advancing our pipeline of molecular diagnostic product candidates across a range of therapeutic areas. We intend to advance our existing pipeline of molecular diagnostic product candidates to commercialization. We believe that our expertise in discovery will enable us, early in the development cycle, to identify biomarkers with high probabilities of success and to discontinue product candidates that may fail or have low probabilities of success. In addition, we plan to opportunistically in-license biomarkers to complement our pipeline with new product

candidates. We believe that the breadth of our pipeline enables us to diversify the product development risk typically associated with biotechnology and pharmaceutical companies;

Adopting a multi-pronged approach to the commercialization of our product candidates. Our commercialization strategy may include three approaches: clinical laboratory services, direct product sales or out-licensing our products. We intend to evaluate our commercialization strategy on a product-by-product basis and may implement different strategies in different geographic markets;

Maintaining and expanding our technology advantage. We believe that our principal strength is our proprietary technology platform and associated patent portfolio and trade secrets. We believe that maintaining our technology advantage and expanding our technology platform will enable us to discover new biomarkers and develop molecular diagnostics from these biomarkers. Moreover, we plan to continue to increase and protect our patent portfolio and trade secrets;

Aligning ourselves with third-party payors to encourage the acceptance of our products. We believe third-party payors have financial incentives to encourage the market acceptance of molecular diagnostic tests in order to control costs and the ability to facilitate market penetration of our product candidates. Consequently, we intend to focus on opportunities where the interests of third-party payors are aligned with those of patients. For example, we will pursue opportunities in which high-cost therapies are ineffective or may result in serious side effects in some patients or where there is a need for early, cost-effective detection of disease; and

Collaborating with pharmaceutical companies. We intend to continue establishing high-value collaborations with pharmaceutical companies and leverage these relationships to expand our capabilities and develop new product opportunities.

Benefits of Our Solution

We expect that our molecular diagnostic tests will offer an unambiguous benefit to the patient and for many of our tests patient and third-party payor interests will be aligned because of better treatment outcomes and reduced costs. We expect to achieve these benefits by providing physicians with key information to optimize therapy decisions for their patients. We believe that our products will benefit interested parties as follows:

Drug Response Markers patients and physicians may benefit from better treatment outcomes; third-party payors may benefit from avoidance of ineffective therapies and earlier use of effective therapies, which may reduce overall treatment costs;

Drug Safety Markers patients and physicians may benefit from reduced risk of significant side effects; third-party payors may benefit from reduced costs of treating side effects;

Disease Diagnostics patients and physicians may benefit from better treatment outcomes; third-party payors may benefit from more cost-effective health management;

Disease Prognostics patients and physicians may benefit from better treatment outcomes due to selection of interventions that align with the expected course of disease; hospitals may benefit because of the ability to provide certain enhanced services for patients with the poorest predicted outcome, such as those at risk for early re-admission for which the hospital is financially liable; third-party payors may benefit by focusing disease management resources on patients with the worst prognosis; and

Patient Monitoring patients and physicians may benefit from better treatment outcomes due to timely interventions; hospitals may benefit because of improved treatment outcomes and efficiencies; third-party payors may benefit from cost avoidance due to improved treatment outcomes.

Our Product Candidates

We are developing a broad pipeline of molecular diagnostics to aid in the diagnosis and treatment of a range of diseases, including cardiovascular diseases, cancer and CNS disorders. Based on the capacity of our technology platform and our experience to date in biomarker discovery, we believe that we can develop and launch up to four new products per year, with the first product expected as soon as 2009. We expect to regularly update our product development and commercialization plans, however, as some candidates may advance more quickly, while others could face scientific, business or regulatory obstacles and be replaced by other molecular diagnostic tests from our ongoing biomarker discovery efforts. The table below provides an overview of our current product pipeline. Each of the entries listed in the column "Stage in Our Product Development Process" in the table below are set forth in a table with accompanying descriptions on page 78 in "Business Our Product Development Process."

Disease Area Test Name	Description	Stage in Our Product Development Process	Estimated Potential U.S. Patients per Year (000s)
Cardiovascular Disease			
Congestive Heart Failure	Prognostic test for cardiac events in patients with congestive or acute heart failure	Development	5,200
Coronary Stenosis	Screening test for arterial narrowing in patients at risk for coronary artery disease	Development	15,800
Vulnerable Plaque	Identify patients at high near-term risk for heart attack or stroke	Development	15,800
Oncology			
Herceptin® Response	Response prediction and monitoring in HER2+ breast cancer	Discovery	50-55
Avastin® Response	Response prediction and monitoring in colorectal and non-small cell lung cancer	Discovery	200-250
Tykerb® Response	Response prediction and monitoring in HER2+ breast cancer	Discovery	50-55
CNS			
Alzheimer's Disease	Early diagnosis of Alzheimer's Disease	Development	4,500-5,000
Multiple Sclerosis	Measure disease activity for therapy selection and adjustment	Discovery	400
Tysabri® Response/Safety	Response prediction and monitoring; Safety monitoring	Discovery	80-100
Other			
Preeclampsia	Early detection of preeclampsia	Discovery	5,000-6,000
Enbrel®/Remicade® Safety	Identify/monitor risk of infection in patients receiving Enbrel/Remicade therapy	Discovery	400-500
Avandia® Response	Early indicator of drug response in patients with Type II diabetes	Development	300-400

Our Leading Product Candidates

Congestive Heart Failure

Congestive heart failure, or CHF, a condition in which the heart cannot pump enough blood to the rest of the body, affects an estimated 5 million people in the United States and we believe a similar number in Europe. CHF may result from a variety of causes, including narrowing of the coronary arteries, a previous heart attack, chronic high blood pressure, or defects of the heart valves or muscle itself. Patients typically present with rather non-specific symptoms such as swollen legs or ankles, shortness of breath, or weight gain. To treat CHF effectively, and avoid its more serious complications, doctors need an accurate diagnosis and a prediction of the expected course of the patient's condition.

We have in-licensed the commercial rights to a new biomarker for CHF that was discovered by scientists at University Hospital Maastricht. As reported in the Journal of the American College of Cardiology in March 2006, these scientists and clinicians at the Massachusetts General Hospital studied 599 patients presenting to the emergency department with shortness of breath, of which 209, or 35%, were found to have acute heart failure. Measurements of two proteins found in plasma, called NT-proBNP and galectin-3, were each found to correlate with a diagnosis of acute heart failure. In a multivariate logistic regression analysis, an elevated level of galectin-3 was the best independent predictor of 60-day mortality or the combination of death/recurrent HF within 60 days. Moreover, the combined level of these two proteins was a highly significant predictor of a patient's odds of death or recurrent heart failure within 60 days. The preliminary results of a second, multi-center study investigating the role of galectin-3 in heart failure conducted by researchers in the Netherlands were presented at the American College of Cardiology 56th Annual Scientific Session in March 2007 and presented in abstract form in the Journal of the American College of Cardiology in March 2007. This prospective study with a follow-up of an average of 3.4 years involved 240 patients with advanced but stable CHF. The researchers in this study reported that elevated levels of galectin-3 were strongly related to mortality over the duration of the follow-up. Based on the results of these two independent prospective studies, we believe that galectin-3 has clinical utility as a predictor for survival in both acute and stable CHF.

We plan to conduct an additional study with our partner Humana under our collaboration agreement detailed in the section of this prospectus entitled "Business Our Collaborations." We believe that the results of this study will provide economic data that may encourage market acceptance by payors and hospitals of our galectin-3 diagnostic test, if it receives regulatory clearance. We plan to develop this test for the severity and prognosis of patients with CHF based on measuring the plasma levels of galectin-3 alone and in combination with NT-proBNP. We believe that this test will benefit patients, physicians, hospitals and third-party payors by improving the ability to identify, and the management of, patients with the worst prognosis, thereby potentially reducing the incidence of adverse outcomes such as hospitalization and death. We have initiated various activities in support of an FDA pre-market notification 510(k) submission for regulatory clearance of a galectin-3 *in-vitro* diagnostic test, including the selection of anti-galectin-3 antibodies available to us and the development of a commercial assay for identification and measurement of galectin-3 in plasma and serum. Subject to completion of these and other development activities, we intend to submit a 510(k) pre-market notification in the fourth quarter of 2008 for FDA clearance of our galectin-3 diagnostic test for use in patients with CHF. Subject to our submission to the FDA and the FDA's review and marketing clearance of our 510(k) submission, we would anticipate introducing our molecular diagnostic test based upon the galectin-3 biomarker in the United States in 2009.

To reach the broad, hospital-based market, we intend to market this product as an *in vitro* diagnostic test kit, which we may sell to distributors or license to one or more third parties with an established presence in hospital laboratories. In parallel with our development and regulatory activities for this product, we have initiated discussions with potential commercial partners for distribution in the

United States and Europe and out-licensing in Asia. We expect to finalize our commercial strategy for this product candidate in the middle of 2008.

Coronary Stenosis

Narrowing of the arteries that supply blood to the heart, called coronary stenosis or coronary artery disease, affects approximately 15 million people in the United States. We believe the prevalence is similar in Europe. As the heart muscle becomes deprived of its blood supply, patients with coronary stenosis may experience chest pains, called angina pectoris. In more severe cases, the narrowed artery can become blocked by a blood clot, resulting in a heart attack. Unfortunately, patients are often unaware of coronary stenosis until it has progressed to the point where it causes acute symptoms and doctors can only measure the degree of arterial narrowing or blockage through an invasive procedure called angiography that involves inserting a catheter and injecting a dye directly into the arteries.

In an effort to develop an accurate but less invasive test for coronary stenosis, we studied plasma samples from 40 patients with advanced coronary artery disease and 40 matched patients without advanced coronary artery disease who were undergoing coronary angiography. The patients were part of an ongoing trial at Duke University called the CATHGEN Research Project. We believe this study is a valuable resource for the investigation of biomarkers associated with coronary heart disease and related disorders. The project began by collecting DNA and blood samples in December 2000 from consenting research subjects undergoing cardiac catheterization at Duke University Medical Center. In our biomarker discovery study, which was conducted as part of a research collaboration with a major pharmaceutical company, we identified a panel of 15 metabolites that was highly correlated with the presence of coronary stenosis as measured by angiography. We have filed a patent application on this discovery. Both we and the pharmaceutical company hold worldwide rights to commercialize products based on this invention.

In 2007, as part of the HRP initiative, we commenced a second study to analyze approximately 140 patient samples from the CATHGEN Research Project. The main objective of this study is to identify novel biomarkers of increased risk for major acute coronary events attributable to vulnerable plaque, however, we will also use the results for verification of our coronary stenosis biomarker. This study will also include an analysis of potential protein biomarkers for coronary stenosis, which may strengthen the biomarker's performance characteristics or facilitate development of a molecular diagnostic test. In the event this leads to additional inventions, we would own commercialization rights to them. In December 2007, we launched, as part of the HRP initiative, a large prospective study named the BioImage study. This study involves 7,300 volunteers recruited from the Humana membership who are at medium to high risk for major cardiovascular events. Approximately 1,000 of these volunteers will be invited to undergo advanced coronary imaging using computed tomography, or CT. This portion of the BioImage study is scheduled to be completed in the fourth quarter of 2008 and we expect it will provide us with an opportunity to verify and qualify our coronary stenosis biomarker. After the verification and qualification studies are successfully completed, we intend to develop a diagnostic test based on this biomarker panel.

Vulnerable Plaque

There are approximately 15 million people in the United States, and we believe similar numbers in Europe, with atherothrombotic cardiovascular disease, also known as vulnerable plaque. This condition is characterized by the build-up of fatty deposits called atherosclerotic plaque in the walls of blood vessels. In the most common and most serious form of this condition, the plaque may suddenly rupture which can cause the formation of a blood clot that blocks the flow of blood to the heart or the brain, often resulting in a heart attack or stroke. Because there is no specific, non-invasive diagnostic test to determine whether a patient has atherosclerotic plaque that is vulnerable to rupture, these events usually occur without any warning.

As part of the HRP initiative, we are working on the discovery and validation of novel biomarkers for predicting a patient's risk of acute atherothrombosis. The HRP initiative is described under "Our Initiatives" below. In 2007, we commenced the first of the HRP studies to analyze approximately 140 patient samples from the CATHGEN Research Project. This study uses a case-control research design in which the cases are patients who underwent angiography and who developed a heart attack or stroke within two years following the enrollment angiography. The controls in this study were patients who were generally similar to the cases at the time of the enrollment angiography, but who did not develop the cardiovascular event. In this study, a multivariate biomarker was discovered with a greater than 80% sensitivity and specificity, which, if confirmed in subsequent studies, would be superior to currently available means of identifying the population at high near-term risk for heart attack or stroke. Of the 7,300 targeted participants in the BioImage study, six thousand participants are expected to undergo extensive and advanced baseline studies including ultrasound and cardiac CT imaging, while a subset of 2,000 participants are expected to undergo additional CT or MRI imaging. Participants in the BioImage study will be followed and monitored for major cardiac events and stroke for approximately three years following the initial imaging. The BioImage study will provide us with an opportunity to qualify this recently discovered multivariate biomarker set of elevated coronary risk and stroke, and the results may support regulatory filings of any molecular diagnostic test we develop based on this biomarker.

We have the right to develop diagnostic products from discoveries made as part of the HRP initiative, and we have the right to use sample aliquots and data derived from the HRP initiative for biomarker validation. However, participant companies in the HRP initiative also hold non-exclusive, perpetual, royalty-free licenses for any and all uses of the inventions and data derived from the studies conducted under the initiative, as described in "Business Our Collaborations."

Herceptin Response and Avastin Response

Herceptin® (trastuzumab) is a therapy for women with metastatic breast cancer whose tumors produce excess amounts of a protein called HER2. The American Cancer Society estimates that 178,000 American women will be diagnosed with breast cancer in 2007, and that 40,000 breast cancer patients will die of their disease. Approximately 25 to 30% of breast cancer tumors are HER2 positive. Herceptin is approved for first-line use in combination with paclitaxel, or as a single agent for patients who have received one or more chemotherapy regimens. In clinical trials, the addition of weekly doses of Herceptin together with or following chemotherapy was shown to extend overall patient survival. Unfortunately, despite pre-testing for high levels of HER2, only a minority of patients have been shown in clinical trials to respond to Herceptin treatment.

We are conducting a biomarker discovery project to identify an early indicator of response to Herceptin treatment. We believe that a test based on an early response biomarker would benefit both patients and third-party payors by enabling more efficient use of Herceptin treatment. Patients with early evidence of response would be encouraged to continue treatment, while those who did not respond would have the opportunity to switch to other, potentially more effective therapies. In

collaboration with M.D. Anderson Cancer Center, in Houston, Texas, we have access to samples and associated treatment information from 80 patients who were treated with Herceptin.

Avastin® (bevacizumab) is a cancer treatment that works by inhibiting angiogenesis, the process by which new blood vessels develop and carry vital nutrients to a tumor. This mechanism makes Avastin a valuable component of the treatment regimen for many types of cancer, including colorectal or lung cancer, the two cancers for which Avastin is currently approved. As a consequence, Avastin has become one of the largest selling cancer drugs ever. According to the American Cancer Society, more than 350,000 Americans will be diagnosed with colorectal or lung cancer in 2007. We estimate that over 500,000 patients in the United States and Europe may be eligible for Avastin treatment annually. As with other cancer therapies, some patients respond well to Avastin treatment and others do not, and many patients who initially respond later develop resistance. Based on studies described in the manufacturer's prescribing information, Avastin is effective in less than half of patients. At an annual cost between \$50,000 and \$100,000, we believe there is a compelling need for an early response test that would enable more efficient use of Avastin by encouraging responding patients to continue treatment, while enabling non-responders to switch more quickly to other therapies.

We are conducting a biomarker discovery project to identify an early biomarker of response to Avastin treatment. For this project we are collaborating with Roswell Park Cancer Institute, or RPCI, in Buffalo, New York, and we have acquired from RPCI patient samples and associated treatment information for the initial discovery study. We and RPCI will collaborate on discovering and advancing blood-based biomarkers for response to treatment with Avastin in patients with colorectal cancer. In addition, we intend to initiate studies with Avastin in patients with non-small cell lung cancer.

While our biomarkers for response to treatment with Herceptin and Avastin are currently in the discovery stage, we believe that our work will proceed rapidly, based on the availability of samples and retrospective clinical data. In addition, we plan to recruit patient volunteers undergoing treatment with Herceptin or Avastin through our partnership with Humana, which should facilitate the verification and qualification studies for these biomarkers. Because of the focused nature of the market and the high value of individual tests, we may launch the Herceptin and Avastin response tests as a service, through our own labs or a reference laboratory partner.

Our Other Product Candidates

Tykerb Response In March 2007, the FDA approved Tykerb® (lapatinib) for use in combination with Xelodar (capecitabine), another cancer drug, for patients with advanced, metastatic breast cancer that is HER2 positive. In the United States, approximately 8,000 to 10,000 women die from metastatic, HER2 positive breast cancer each year. Tykerb combination treatment is indicated for women who have received prior therapy with other cancer drugs, including an anthracycline, a taxane and Herceptin. Because it has a different mechanism of action, Tykerb works in some HER2 positive breast cancers that have been treated with Herceptin and are no longer benefiting from it. With a minority of patients expected to respond to Tykerb, based on studies referenced in the prescribing information, we believe there will be a significant opportunity to stratify patients based on a biomarker-based test that could be used as an indicator of each patient's likelihood to respond to Tykerb. We are planning a study with Humana to develop a biomarker for early response to Tykerb and several other recently approved oral anticancer drugs, including Sutent® (sunitinib) and Nexavar® (sorafenib). Like our Herceptin response and Avastin response markers, this test would help doctors determine which patients should continue to receive Tykerb and which patients should switch to alternative treatments.

Alzheimer's Disease With the aging of the population, Alzheimer's disease, or AD, is becoming an increasingly important problem in developed countries throughout the world. For example, according to the Alzheimer's Association, AD affects approximately 5 million people in the United States and the collective cost of caring for these patients is nearly \$150 billion per year. According to

Alzheimer Europe, approximately 6 million people in Europe suffer from AD or some other form of dementia. Although there is currently no cure for AD, an early diagnosis of the disease is believed to offer the best opportunity for treatment to improve a patient's quality of life and slow the progression of the disease. We have discovered a series of biomarkers in urine that could be used to screen patients for AD, providing a potentially useful tool in diagnosing the disease before it reaches an advanced stage. This program is currently in the product development stage, and we are currently identifying a source of samples suitable for verification and clinical development.

Multiple Sclerosis and Tysabri Multiple Sclerosis, or MS, is a serious medical condition that affects approximately 350,000 people in the United States and an estimated 2.5 million individuals worldwide. MS is thought to be an autoimmune disease that affects the CNS. The most common form of MS is characterized by an irregular pattern of remissions and exacerbations of disease symptoms. By allowing doctors to monitor the underlying disease activity, biomarkers have the potential to markedly change and advance care for individuals with MS. We are conducting two biomarker discovery projects with the MS Research Center of New York, or MSRCNY, as further described in "Business Our Collaborations." The first project, currently in the discovery stage, aims to identify plasma markers of MS disease activity, which could be used to diagnose and monitor patients. The work on this biomarker leverages earlier discovery studies done by MSRCNY and uses available samples. The second project focuses on MS patients receiving Tysabri® (natalizumab), a treatment which has been associated with a rare but serious side effect. We seek to identify early markers of Tysabri efficacy and side effects to aid in patient management. As of September 2007, approximately 150 MS patients receiving Tysabri have been enrolled in our study and approximately 60 of these patients have been in the study for more than six months. We expect to initiate laboratory biomarker discovery studies for this project in the first quarter of 2008.

Preeclampsia Preeclampsia is a common complication of pregnancy characterized by high blood pressure, weight gain and protein in the urine. Its cause is unknown. Preeclampsia affects 5% to 10% of pregnancies in the United States and Europe and is among the major contributors to maternal and perinatal morbidity and mortality worldwide. The Preeclampsia Foundation estimates that it costs over \$7 billion per year in the United States alone to care for the hypertensive complications of mothers and for babies born prematurely because of preeclampsia. A biomarker that identifies women at greatest risk, or a biomarker that detects the onset of preeclampsia before serious symptoms develop, would enable more advanced risk management strategies and investigation of novel interventions. We are in the planning stage of a project to identify a biomarker for prediction or early detection of preeclampsia.

Enbrel/Remicade Safety Enbrel® (etanercept) and Remicade® (infliximab) are treatments indicated for certain serious autoimmune disorders, such as rheumatoid arthritis, psoriatic arthritis, plaque psoriasis, Crohn's disease and other related conditions. According to the manufacturers, over 400,000 people worldwide have used Enbrel and over 840,000 have used Remicade. These products work by reducing excess amounts of a protein called TNF, which stimulates the immune system. However, these treatments, which are effective in only about half of the patients, may also lower the body's ability to fight infections, a condition called immunosuppression, which in some patients leads to dangerous and life threatening complications. We are planning a discovery project to identify biomarkers that can be used to monitor patients receiving Enbrel or Remicade for early signs of immunosuppression.

Avandia Response Avandia® (rosiglitazone maleate) is a drug for the treatment of Type II diabetes, a condition that affects an estimated 20 million people in the United States. Since the incidence of Type II diabetes increases with age and is correlated with obesity, the worldwide number of diabetic patients is also growing rapidly as people adopt unhealthy diets and more sedentary lifestyles. Like other diabetes treatments, Avandia helps patients to better control their blood sugar levels and avoid the progression and complications of this chronic disease. Based on studies referenced

in the manufacturer's prescribing information, approximately half of the patients taking Avandia will respond to the drug, and unfortunately, because both patients and the underlying causes of diabetes are heterogeneous, doctors cannot predict which drug or combination of drugs will work best for a particular patient. Moreover, it may require eight to twelve weeks of therapy to detect a response based on current standard tests. In collaboration with a major pharmaceutical company, we studied plasma and urine samples from 83 male diabetic patients, each of whom was treated with one of three oral diabetes drugs for eight weeks. In this study, we discovered a biomarker that can predict a patient's response to Avandia before treatment is initiated. None of the conventional blood tests for diabetes were able to make this prediction. We are in the product development stage for a molecular diagnostic test based on this biomarker. This test would help doctors to select patients for Avandia treatment. The major pharmaceutical company with which we collaborated has co-exclusive rights to develop and commercialize tests based on these biomarkers and has the right to acquire exclusive rights prior to December 2007 in exchange for a \$500,000 payment for each of the two biomarkers discovered, including the biomarker underlying our current product candidate.

Earlier this year, following the announcement of the possible increased cardiac risks associated with Avandia and the expanded warning related to deterioration of CHF in patients taking Avandia, we initiated computer-based research related to the use of galectin-3 as a drug safety marker for use in CHF. This led to certain discoveries for which we recently filed a patent application and we own all rights in this application. Since the announcements of possible safety concerns related to Avandia, use of Avandia has substantially declined, and we are currently evaluating the market opportunity for Avandia response and safety markers and considering alternatives on how to best pursue any such opportunity.

Our Technology Platform

We have established a proprietary technology platform that we apply on a large scale for discovering and validating novel biomarkers that may be used for molecular diagnostics. Our platform integrates molecular measurement technologies based on specialized mass spectrometry, chromatography, nuclear magnetic resonance spectroscopy and multiplexed assay technologies. We are able to detect, quantify and characterize over 1,000 biological molecules that may be key indicators of health, disease and drug response from less than a few drops of blood or other bodily fluids. Our proprietary data analysis, statistics and bioinformatics workflows are integrated with our measurement suite to enable rapid evaluation and interpretation of this molecular data. Over the course of our five years of operation, we have amassed extensive proprietary databases of identified and characterized biological molecules and their functions, detected across many diseases and treatments. By leveraging this experience we are able to apply our technology platform broadly and efficiently to multiple, diverse programs for biomarker discovery and molecular diagnostic development.

The key elements of our technology platform are illustrated in the diagram below and described in the sections that follow. As shown in the diagram, our biomarker discovery workflow includes three main elements: molecular measurement, statistical analysis, and bioinformatics. We use a range of software applications to efficiently process and integrate the vast amounts of data in our discovery pipeline; we call this our pipelined production environment. Our work is supported by a laboratory information management system, or LIMS, and monitored by quality assurance and quality control processes to ensure the accuracy, integrity and reproducibility of our findings. We believe that our technology platform represents a significant competitive advantage in our ability to discover and develop new biomarkers.

Our Biomarker Discovery Workflow

Molecular Measurement. Starting with an experimental design, our molecular measurement process includes our metabolomics and proteomics tools to measure and identify metabolites and proteins in patient samples. We combine this with data from external sources such as genetic information and clinical results that accompany the samples. We use seven specialized mass spectrometry, chromatography, nuclear magnetic resonance spectroscopy and multiplex assay platforms that we have developed and/or integrated to measure and identify biological molecules present in samples such as blood, urine or tissue. In addition, we have designed our technology to analyze molecules as diverse as proteins, protein variants, lipids, fatty acids, amino acids and many other compounds involved in complex biological processes. As a result, we are able to measure, at a high level of resolution, specific molecules that reflect the activity of multiple important disease and drug target pathways in the body. Making these complex molecular measurements across many hundreds or thousands of biological samples while ensuring that the fidelity, quality and integrity of each molecular measurement is consistent from the first sample to the last sample is a fundamental characteristic of our platform. We perform these measurements through the use of proprietary protocols comprising internal and external molecular standards and sophisticated data integration and normalization algorithms. We believe that this capability represents a technical milestone in conducting large scale biomarker studies that provides us with a technological lead over our competitors. Our automated laboratory process is designed to ensure precision, repeatability, reproducibility and accuracy of all measurements in order to achieve rapid and efficient translation of results to clinical validation studies and to subsequent regulatory applications.

Statistical Analysis. Our data processing and statistical analysis approaches are customized for the types of molecular data generated by our measurement technologies. Initially, we use univariate analysis to identify molecular measurements that are statistically correlated with the clinical condition of interest. We have developed and use specialized, distinct analysis modules, including predictive statistical modeling, exploratory clustering and correlation networks, to identify biomarkers for diagnosis, prognosis, treatment response prediction, adverse event prediction and patient monitoring. We use these analysis modules to evaluate the association of each measured molecule, alone or in combination with other molecules, with the desired outcome. As a result, we are able to assess the potential clinical utility of a biomarker in a target population. In addition, we analyze our measurements in conjunction with other information that was provided along with the patient samples, such as genetic information, clinical imaging results or microbiological data. This analysis allows us to create a combined dataset comprising informative bioanalytical content, as well as the information to

establish final assay performance characteristics, including sensitivity and specificity criteria. We further evaluate the prevalence of a biomarker in the target population and account for the presence of potential conflicting factors within our analysis modules.

Bioinformatics. We use our proprietary bioinformatics platforms to further analyze the biomarkers we discover and to place them into their biological and clinical context. We have developed a suite of database and custom application tools which we use to characterize and elucidate the function of molecules that we identify as informative from statistical analyses. Establishing the biological plausibility of a novel biomarker, such as its role in pathophysiology, is important for its acceptance and regulatory approval as a novel molecular diagnostic. We use our bioinformatics platform, including our BGM Seer and BGM Biological Traversal Engine or BTE tools, to identify the biological pathways and disease mechanisms that are associated with a putative biomarker. We also use these tools to identify molecular variants, such as protein polymorphisms, that are associated with disease, health or drug response. As a result, the biomarkers generated from our technology platform have well characterized, well understood correlations to biological pathways and clinical data, making them the basis for potentially effective molecular diagnostic products.

Our Initiatives

Liver Toxicity Biomarker Study Initiative

LTBS is a joint research project between us and the FDA to discover preclinical biomarkers for human liver toxicity. We are working on this initiative with the FDA's National Center for Toxicology Research, or NCTR, under a Collaborative Research and Development Agreement, or CRADA. The LTBS initiative receives scientific support and funding from seven large pharmaceutical companies, including Daiichi Sankyo Co., Ltd. and Eisai Co., Ltd., Johnson & Johnson Pharmaceutical Research & Development LLC, Mitsubishi Chemical Corporation, Orion Corporation, Pfizer Inc. and UCB S.A., as well as technology support from Applied Biosystems Group and Affymetrix, Incorporated. The LTBS initiative falls within the FDA's Critical Path Initiative, which is focused on modernizing the medical product development process to make development more predictable, productive and cost-effective. The goal of this initiative is to identify preclinical biomarkers of liver toxicity to reduce the failure rate of drug candidates in later stage clinical trials.

Liver toxicity is a leading cause of preclinical and clinical drug development failure, resulting in a significant amount of wasted research and development resources for pharmaceutical companies. We and our collaborators at the FDA will use a variety of state-of-the-art technologies, including genomic, proteomic and metabolomic analyses and bioinformatics analysis to characterize the molecular effect of drugs on liver toxicity. We will select drugs that have appeared safe when analyzed using current animal or laboratory models, but were later shown to cause liver toxicity. We will then study these drugs by comparing the effects of the toxic drug with a chemically and pharmacologically closely related drug that has been successfully commercialized without the observed liver toxicity. We, the FDA and the participating companies will evaluate initial results, which are expected during the third quarter of 2008, to determine the design and methods of one or more follow-on phases of this research. Initiation of further studies is subject to provision of additional funding by corporate partners.

We own the rights to commercialize our inventions made pursuant to the research plan and, jointly with the FDA, we own the rights to commercialize any joint inventions. The CRADA provides that we may provide data derived from this collaboration to the companies with whom we have entered into LTBS participation agreements. As contemplated by the CRADA, we entered into participation agreements with these seven pharmaceutical companies, pursuant to which they each paid us approximately \$350,000 to sponsor our research activities under the CRADA. Additionally, we have granted each participating company a non-exclusive, perpetual, royalty-free license to our intellectual property rights relating to the data derived from the CRADA research, including the right to develop and commercialize companion diagnostics for the participating companies' pharmaceutical products.

The participating companies may use the data for internal purposes only and to practice the inventions, but are prohibited from publishing or using any such data in support of patent applications involving the composition or use of a biomarker useful in detecting or predicting liver toxicity. Furthermore, each participating company has the right to designate one member to serve on the scientific advisory committee, which provides advice to us and the FDA regarding the research under the CRADA. Each participation agreement expires upon the earlier of termination of the CRADA, completion of the research under the CRADA or two years following the effective date of the respective participation agreement. Under the terms of the CRADA, we have agreed to pay approximately \$400,000 to the FDA in support of collaborative research and development activities with the FDA. The CRADA expires in February 2008, unless otherwise extended in writing by both parties. The CRADA may be terminated by both parties or unilaterally, but in any event, both parties have agreed to provide research materials in sufficient quantities to complete the research plan.

Concurrently with our execution of the participation agreement with Mitsubishi Chemical Corporation, we also entered into a royalty-bearing license agreement pursuant to which we have agreed to grant Mitsubishi exclusive development and commercialization rights for any biomarkers that may originate from the research under the CRADA to which we have the rights to offer such license. The license requires Mitsubishi to pay us royalties on net sales on products and services sold pursuant to the license agreement. The license is restricted to commercialization rights in the field of diagnostics in Asia, but provides Mitsubishi with the right of first refusal on commercialization rights in the field of diagnostics outside of Asia. The agreement terminates upon the last to expire of the patents licensed to Mitsubishi under the license, unless terminated earlier by the parties.

HRP Initiative

We are leading the HRP initiative for atherothrombotic cardiovascular disease, also known as vulnerable plaque, which remains the leading cause of morbidity and mortality in the Western world and is rapidly progressing towards a similar status in developing countries. Atherothrombosis occurs when vascular plaque ruptures leading to thrombosis in the affected vessel, which in turn can progress to life-threatening conditions such as heart attacks and stroke. The condition is asymptomatic until the presentation of a serious or life-threatening event. Despite its medical and economic importance, there are currently no known methods for the screening, diagnosis or treatment of vulnerable plaque.

The HRP initiative consists of a series of pre-competitive, multi-party research and development projects, which are administered and coordinated by us pursuant to participation agreements with Philips, Merck and AstraZeneca. The overall goals of the HRP initiative are to advance the understanding, recognition and management of atherothrombotic cardiovascular disease, to provide a roadmap for the development and registration of screening, diagnostic and therapeutic interventions for high-risk plaque and to promote the use of these interventions by patients, pharmaceutical companies and third-party payors. We believe the HRP initiative is the most extensive coordinated biomarker discovery and validation project ever undertaken.

The specific goals of the initiative include:

discovering and validating a blood-based biomarker for high-risk plaque suitable for high-volume patient screening;

developing and validating novel non-invasive imaging methods to characterize and classify patients with high-risk plaque and establishing the relationship between such imaging methods and blood biomarkers;

developing a regulatory framework for high-risk plaque-related products; and

establishing an authoritative third-party source for high-risk plaque-related information.

Pursuant to the participation agreements, each of Merck, AstraZeneca and Philips has agreed to commit an aggregate of \$5.0 million over a three-year period to support the HRP initiative, with a portion of the funds provided by Philips to be in the form of in-kind contributions, as described in the participation agreement. Under the terms of the participation agreements, we are permitted to enter into participation agreements with up to three additional participants under substantially similar terms, which will result in the commitment of an additional \$15 million in funding for the HRP initiative. As set forth in the participation agreements, the HRP initiative is governed by a joint steering committee, or JSC, which is comprised of designees of participating companies, and led by a scientific program board, consisting of academic experts in the cardiovascular field, which advises the JSC and assists in the design of the research protocols. The JSC is responsible for the overseeing the conduct and progress of the HRP initiative, including finalizing and approving program activities, program and activity budgets, external communications, patent filings, third-party licensing and commercialization of data and rights under the HRP initiative. We will own any inventions and data that are conceived in the conduct of the HRP initiative and have agreed to grant each participating company a non-exclusive, perpetual, royalty-free license to all such inventions and data for any and all uses. Each participation agreement expires upon the earlier of the completion of the HRP initiative or the fifth anniversary of such agreement, unless otherwise terminated by the parties. We are in discussions to enter into several agreements with other academic institutions and corporations for additional HRP initiative activities.

In March 2007, we submitted a research proposal on behalf of the HRP initiative to the NHLBI-Framingham Heart Study Biomarkers of Cardiovascular Risk Initiative. In May 2007, we were notified by the Framingham Heart Study that our proposal had been approved, and we expect to participate in the formation of the Framingham Heart Study Biomarkers Consortium and participate in biomarker discovery studies using samples from the Framingham Heart Study participants. We expect that our biomarker discovery and qualification studies on the Framingham samples will use our metabolomics and proteomics capabilities, and we plan to collaborate with the Netherlands Metabolomics Centre for this project. We expect to commence the biomarker studies on the Framingham samples in the first half of 2008, subject to execution of a definitive agreement with all parties.

In December 2007, we launched a large prospective study named the BioImage study. This study involves 7,300 volunteers recruited from the Humana membership who are at medium to high risk for major cardiovascular events.

Our Collaborations

We have entered into research and development collaborations with several pharmaceutical companies, medical institutions and healthcare organizations. Our key research and development collaborations are summarized below.

ACS Biomarker

In May 2007, we entered into a biomarker product license and collaboration agreement with ACS Biomarker B.V., or ACS Biomarker. ACS Biomarker, a company that was formed with technology exclusively licensed from the University of Maastricht and other parties, was founded to develop and commercialize cardiovascular biomarkers discovered at the Cardiovascular Research Institute Maastricht, or CARIM. Pursuant to the agreement, as supplemented by two licensing addenda entered into in May 2007, ACS Biomarker granted us an exclusive worldwide development and commercial sublicense to two proprietary cardiovascular biomarkers for congestive heart failure, galectin-3 and thrombospondin-2, licensed by it from the University of Maastricht. In addition, we have sublicensed the rights to certain peptides for use in diagnosing for atherothrombotic vascular disease, subject to certain conditions to be met by ACS Biomarker.

Under the terms of the agreement, we have initiated implementation plans for the development of the licensed biomarkers and we have paid ACS Biomarker the first milestone payment under the

agreement. We are obligated to pay ACS Biomarker milestone and/or royalty prepayments to the extent we achieve certain development and/or regulatory approval milestones and reimburse ACS Biomarker for certain patent expenses incurred prior to the effective date of the agreement. In addition, we will pay ACS Biomarker royalties based on net sales of products commercialized by us, and a percentage of any consideration received by us from any of our sublicensees, to the extent, in either case, such product is covered by the intellectual property that is the subject of the license. We have the right to exclusively negotiate a license to any additional biomarkers that ACS Biomarker owns and determines to offer to any third party, but ACS Biomarker is not obligated to grant us rights to any such biomarker.

The agreement has an initial five-year term and automatically renews for additional periods of one year each unless either party gives not less than 30 days written notice of termination to the other party. Either party may terminate the agreement if the other party fails to perform a material obligation under the agreement, or upon the occurrence of certain bankruptcy events involving the other party. The licenses granted by ACS Biomarker to us will survive any such termination, except that if ACS Biomarker terminates the agreement for our failure to perform any material obligation (including any obligation under any implementation plan), the exclusive licenses granted to us under the agreement will convert to non-exclusive.

Mitsubishi Pharma

In March 2006, we entered into a master services agreement with Mitsubishi Pharma Corporation, or MPC, for the discovery of biomarkers for certain forms of drug-induced muscle toxicity. Under the agreement, we agreed to perform certain comparative muscle toxicity biomarker studies involving certain compounds, including an MPC proprietary compound and fenofibrate, a PPAR-alpha agonist used in the treatment of certain blood lipid disorders, in consideration of the payment by MPC of certain service fees. We completed these studies and, pursuant to the agreement, MPC owns all rights to the data and inventions pertaining to MPC compound and we own all rights to the data and inventions pertaining to the fenofibrate. In addition, we have granted MPC a non-exclusive, royalty-free license, and a right of first negotiation to obtain exclusive rights, to such data and inventions to use in developing compounds and/or diagnostic products and in performing services.

Humana

In May 2007, we entered into a strategic agreement with Humana Inc., one of the largest health benefits companies in the United States, with more than 11 million medical members, and the second largest provider of Medicare benefits in the United States. Under the terms of the agreement, we and Humana will collaborate with the goal of accelerating the development of blood-based biomarkers and identifying the role of blood-based biomarkers in improving health outcomes and containing healthcare costs through individualized medicine. In furtherance of this goal, we and Humana will facilitate biomarker discovery and validation studies among Humana members, for which we will pay Humana. We will also conduct research on the design and testing of methods to promote adoption of individualized medicine among covered populations. We believe that this agreement will allow us to conduct biomarker studies faster, at lower cost and in a manner that better reflects the intended use of the markers than the traditional academic research studies. We expect that the results of these studies may provide the basis for authoritative cost/benefit calculations for our molecular diagnostic product candidates. Pursuant to the agreement, we will offer any blood-based biomarker diagnostic products that we develop from data or services provided by Humana to Humana on preferred terms to the extent sold by Humana to Humana members. In addition, in the event we commercialize blood-based biomarker diagnostic products under this partnership, we will be required to make certain payments to Humana based on such products.

The agreement has an initial three-year term and automatically renews for additional periods of 12 months unless either party gives not less than 120 days written notice of termination to the other party. Humana has agreed during certain specified periods during the term not to enter into any agreement with a third party involving the discovery, development or validation of blood-based biomarker diagnostic tests or understanding the promotion or use of blood-based biomarker diagnostic tests that involve the recruitment of persons subject to certain health maintenance organizations. Either party may terminate the agreement upon 60 days' written notice if the other party is in material default of any of its material obligations under the agreement, or upon the occurrence of certain bankruptcy events involving the other party.

Philips

In July 2006, we entered into a strategic partnership agreement with Philips Electronics Nederland B.V., or Philips, pursuant to which the parties agree to collaborate in the field of biomarker discovery and systems biology in certain disease areas as the basis for the development of novel Philips *in vitro* diagnostic and imaging products. The agreement obligates us to provide Philips with certain consulting support services, contemplates the conduct by the parties of one or more joint development projects involving the identification of biomarkers for certain specified diseases and, under certain circumstances, obligates us to establish a validated analytical platform for the identification of biomarkers at the Philips High Tech Campus in Eindhoven, the Netherlands. If such a laboratory is established prior to April 2008, Philips has agreed to offer us "preferred vendor status" for all biomarker discovery projects we provide to Philips. Pursuant to the agreement, we have granted Philips a right of first negotiation to obtain a license or ownership rights to any of our intellectual property with application in the fields of molecular diagnostics, molecular imaging and/or medical diagnosis. In addition, we have agreed for certain specified periods not to perform services that are identical to the services provided to Philips under a research project or to enter into an agreement with any third party that covers a disease that is the subject of such research project. The agreement has an initial five-year term and automatically renews for an additional period of five years each unless either party gives not less than three months written notice of termination to the other party. Either party may terminate the agreement upon 30 days' written notice if the other party fails to perform any obligation under the agreement, or upon the occurrence of certain bankruptcy events involving the other party.

In connection with the collaboration agreement, Philips made a \$5 million equity investment in us involving the purchase of shares of Series A-1 Preferred Stock. In addition, we granted Philips a right of first negotiation to acquire additional equity and/or to acquire certain of our assets if we determine to offer any such equity or assets to certain competitors of Philips.

Applied Biosystems

In November 2006, we entered into a collaboration agreement with Applera Corporation, through its Applied Biosystems Group, or ABI. Under the terms of the agreement, ABI has agreed to provide us with specialized mass spectrometry instruments for identification, validation and quantification of metabolites and protein biomarkers at no cost to us, to provide maintenance for all instruments it supplies and to provide us with certain associated reagents at a discounted price. We expect to use these instruments in the conduct of our LTBS and HRP initiatives as described in "Business Our Initiatives HRP Initiative," as well as in certain other projects. In exchange for the use of its equipment and the discounted pricing of the reagents, we have agreed under the agreement to provide ABI with information regarding the performance of the instruments, reagents and software related to biomarker discovery and evaluate new products that may be appropriate for our business. Under the terms of the agreement, ABI owns all inventions that it solely conceives and any inventions related to the hardware features of, and the software and reagents used in, the instruments, we own any other inventions that we solely conceive in using the instruments and any inventions related to mass spectrometry workflows, and we and ABI will jointly own any inventions that we jointly conceive in

using the instruments related to mass spectrometry workflows. Pursuant to the agreement, we granted ABI a right of first negotiation to obtain an exclusive license if we determine to offer such jointly-owned inventions to any mass spectrometry instrument system manufacturer and an option to obtain an exclusive, royalty-bearing license to any such jointly-owned inventions. The agreement will continue until the earlier of February 2009 or our completion of the projects outlined under the agreement. Either party may terminate the agreement upon breach by the other party of the agreement if the breaching party fails to remedy such breach within 30 days' written notice.

Netherlands Organization for Applied Scientific Research

In January 2004, we renewed and amended our three-year strategic relationship agreement with the Netherlands Organization for Applied Scientific Research, or TNO. Under the agreement, TNO has agreed to license certain technologies to us for our use in the measurement and evaluation of proteins, metabolites and other biological samples, and we have agreed to make specified annual payments to TNO to maintain our license to these technologies. We have an exclusive, world-wide license with the right to sublicense the intellectual property rights covered by the agreement in the field of systems biology, other than food, nutrition and herbal medicinal products. The parties hold joint rights to certain technologies developed jointly by the parties under the agreement. We retain first right to file, prosecute and maintain intellectual property rights contemplated by the agreement.

TNO also agreed to provide certain contract services to us through the end of 2006. In December 2006, we extended the agreement with TNO for an additional one-year period, until December 2007. We were obligated to spend a minimum of \$3.0 million on these contract services from 2004 through 2007. We plan to negotiate a further extension of this agreement.

Biomarker Discovery and Analysis Services Agreements

In the ordinary course of our business, we have entered into and expect to continue to enter into biomarker discovery and analysis services agreements for biomarker discovery and systems biology studies with pharmaceutical companies and other organizations. Companies for which we have provided or are providing these services include AstraZeneca AB, Boehringer Ingelheim Pharmaceuticals, Inc., Mitsubishi, Ono Pharmaceuticals Co., Ltd., Solvay Pharmaceuticals GmbH, Global Alliance for Tuberculosis Drug Development, Spinal Muscular Atrophy Foundation and two other major pharmaceutical companies. Generally, the companies or organizations that commission these studies own all title and interest to the project deliverables and project discoveries made during the term of the agreements. However, in selected cases, we obtain certain rights to the intellectual property that results from the services we perform, including rights to commercialize molecular diagnostic products based on biomarkers we discover. In addition to paying us fees for conducting biomarker discovery and analysis and other services, these agreements may include additional performance-based rewards, such as success fees if we meet certain conditions.

Clinical Sample Supply and Research Agreements

In the ordinary course of our business, we have entered into and expect to continue to enter into clinical sample supply and research agreements for access to clinical samples for biomarker discovery and diagnostic test validation with a number of organizations. Organizations that are providing clinical samples and other related data to us for research include Duke University, University of Texas M.D. Anderson Cancer Center, Roswell Park Cancer Institute and Multiple Sclerosis Research Center of New York. Generally, the organizations that enter into these agreements provide us with clinical samples and expertise in an area of research interest to us. We expect that these clinical samples may enable us to discover blood biomarkers of disease activity and patient response to certain treatments. In most instances, we own any inventions that we conceive solely from these clinical samples and have rights to commercialize any discoveries. In each case, the organization supplying the clinical samples may retain certain rights to the data and results produced. We may be obligated to make certain payments to the supplying organization for having supplied us with the clinical samples.

Subsidies and Grants

Subsidies and grants for research and development relevant to our business are available in the United States and Europe at the national level and at the European Union level. We are party to a number of grant applications, including four submissions with academic institutions from Groningen, Amsterdam, and Leiden under the "Preliminary Call" from the Center for Translational Molecular Medicine, or CTMM. CTMM is a public-private consortium that comprises a multidisciplinary group of parties—universities, academic medical centers, medical technology enterprises and chemical and pharmaceutical companies. We plan to continue to evaluate opportunities for projects under government or public-private partnership grants or subsidies that are in support of our primary business objectives.

Our Commercialization Strategy

We intend to implement a multi-pronged commercialization strategy for our diagnostic product candidates. Our commercialization strategy for a given product will likely include one or more of the following approaches:

Clinical laboratory services: For some of our diagnostic product candidates, we plan to pursue a clinical laboratory services model, whereby we would offer our diagnostic products as a testing service through our own qualified laboratory or a contract laboratory. In these situations, we would develop the infrastructure required for the collection, processing, distribution and analysis of patient samples and billing and collection for patient accounts. We believe this clinical laboratory services model would be most suitable for low volume, for example, between 20,000 and 1 million tests per year, higher priced, for example, greater than \$400 per test, diagnostic products, such as those which would be used in conjunction with specialized oncology drugs. For example, our Herceptin response product candidate, which has a target market opportunity in the United States of 30,000 to 50,000 tests per year, may fit this approach. Under this business model we will work with third-party payors to promote awareness of this test among patients and providers and we will market this test directly to the physicians who would order these tests. We will provide information through our website and other media for patients who may benefit from these tests;

Direct product sales: For other of our molecular diagnostic product candidates, we plan to pursue a direct product sales approach, whereby we would develop a diagnostic kit as a finished product that could be used in hospitals, reference laboratories or doctors' offices. We believe that high volume, for example, greater than 1 million per year, relatively low priced, for example, less than \$100 per test diagnostic products could be commercialized effectively utilizing this approach. For example, we may pursue this approach for our congestive heart failure diagnostic product candidate, which has an estimated target market opportunity of up to 5 million tests per year in the United States. We plan to work with third-party payors to promote awareness of this test among patients and providers, and we plan to market this test directly to the physicians who will order these services, and the hospitals that provide these tests. We plan to provide information through our website and other media for patients who may benefit from these tests; and

Out-licensing: For some of our other molecular diagnostic product candidates, we may supplement the service and product sales delivery of our molecular diagnostic product candidates with an out-licensing strategy, in which we would out-license our technology to a third party for development of a finished product or commercial service. We believe this approach is of particular importance for the very high volume, relatively low-priced diagnostic products. Under this business model, our direct customers would be third-party *in vitro* diagnostic companies and reference and specialty laboratories to whom we will out-license our technology and who will

develop the finished product or commercialize testing services. We plan to work with our licensees on a commercial strategy to support the success of our molecular diagnostic business.

We intend to evaluate our commercialization strategy on product-by-product basis and may implement different strategies in different geographic markets as we near commercialization of our first product.

We have worldwide rights to commercialize our product candidates and intend to launch our products first in the United States, which we expect to be the largest market for our products. We also plan to market our products in Europe and may market our products in other parts of the world directly or through partnerships.

Commercialization of reimbursed healthcare products and services does not follow the customary seller-buyer model. In healthcare, the patient, physician, hospital and third-party payor, collectively effect a buying decision. For new healthcare technologies or services, public or private third-party payors make reimbursement determinations, including whether to cover the product or service and if so, the payment amount and specific conditions for coverage. In the United States, the regulatory process that allows products to be marketed and sold is independent of reimbursement determinations. Although physicians are free to use approved products that do not have insurance coverage, coverage and payment levels and terms are critical for the commercial success of a healthcare product. For many available healthcare products or services, the interests are not aligned between patient, physician, hospital and third-party payor.

Third-party payors can promote adoption and use of certain products and procedures, for example, through benefit design. We plan to establish constructive mutually rewarding relationships with third-party payors to promote adoption of our molecular diagnostic product candidates. This is commonly referred to as a "push" strategy. We believe that the role of Humana in the selection of our market opportunities and the conduct of our qualification and cost-benefit studies should position us well to develop and implement an effective "push" strategy. Additionally, we plan to develop a provider- and patient-oriented "pull" strategy, where providers and patients request our products. We will combine the third-party payor-oriented push strategy with cost-effective patient pull strategies. In selected cases we might also deploy a provider "pull" strategy alone, or in partnership. For provider pull strategies, we will explore partnerships with the biopharmaceutical companies that make the products related to our drug response or drug safety markers and we will explore partnerships with biopharmaceutical or medical device companies that offer therapies or other diagnostics for the diseases to which our tests apply.

Our Product Development Process

Our product development process comprises planning, biomarker discovery, development of molecular diagnostic tests based on biomarkers and commercialization of those tests. We operate what we believe is the world's most advanced biomarker discovery platform. We have developed and refined our technology in over five years of biomarker discovery and analysis services agreements. This experience provides the basis for us to project the time and resources that are typically required for a biomarker discovery project and the probability of success. We have used industry experience to estimate the time required for development, regulatory and commercialization.

In our current configuration, we believe that we can complete approximately 16 to 20 independent biomarker discovery projects per year, resulting in the successful development and launch of up to four new products per year. The table below summarizes our expected path from biomarker discovery to molecular diagnostic commercialization. The discovery stage includes planning and biomarker discovery; the development stage includes verification, assay development, clinical development and preparation and submission of regulatory documents; and the commercialization stage includes market planning and other preparations for product launch. As contrasted with the lengthy, expensive and uncertain

development of therapeutic products, we believe that our process will be shorter, less expensive and more predictable. Our technology platform enables us to efficiently conduct biomarker discovery projects and to make an early decision whether a biomarker warrants further effort and expenditure. Once we have discovered and evaluated a new biomarker, we believe that we can proceed to development with relatively high confidence. Based on our experience in biomarker discovery and our knowledge of diagnostic product development from industry sources, we estimate that the overall process will last from two years to three and a half years or longer and that the discovery and development costs will total from approximately \$3 million to \$5 million or more per successful product.

The table below and the paragraphs that follow describe each stage of our product development process:

Product Development Process from Discovery to Market

Discovery

Planning. In the planning stage, we identify a product opportunity and the source of samples for discovery and we establish a preliminary research plan and a project timeline.

Biomarker Discovery. The biomarker discovery stage typically comprises analysis of approximately 100 well-annotated clinical samples from a suitable research study. In the biological fluids or tissues of interest, such as blood, urine or biopsy material, we are able to measure over 1,000 different molecules from the equivalent of two drops of blood. Once these measurements are accomplished, we analyze the data using internal statistical models to identify single or multiple molecules that compose a candidate biomarker, which meets the objective of the discovery project. The discovery stage of a project typically lasts three to four months from receipt of the samples and costs on the order of \$350,000 to \$500,000 per project. Based on our experience to date, we believe approximately 35% to 45% of such projects will yield a biomarker suitable for advancement to the verification stage. We believe based on diagnostics industry experience that the odds of success in each subsequent stage are substantially higher, such that we expect an overall yield of one new molecular diagnostic product for each four biomarker discovery projects started.

Development

Verification. Before committing significant development resources to a new biomarker, we first verify our original discovery. The verification stage aims to demonstrate the reproducibility of the findings of the discovery stage by measuring the potential biomarker in a separate set of clinical samples. These samples can be obtained from the same source used for the discovery stage, but must not include samples from the same patients. A typical study size in the verification stage is approximately 100 to 300 subjects.

Assay Development. Concurrent with biomarker verification, we begin work on the assay development stage, which seeks to produce a molecular diagnostic test for the biomarker in a cost-effective, reproducible, and automatable format. Specifically, we evaluate the commercial feasibility of various non-mass-spectrometric methods for quantifying the biomolecule(s) comprising the biomarker. These methods may include enzyme-linked immunosorbant assays, called ELISAs, chromatographic assays, colorimetric and spectrophometric methods, among others. If more than one potentially suitable analytical method exists, we will test the alternatives and choose a preferred format based on our internal criteria. Our criteria include: precision (reproducibility), accuracy, cost, reagent availability, limit of detection, and potential interferences from other biomolecules in the patient sample. We will also evaluate the effects of different clinical sample collection protocols, conditions, and sites, as well as the need for user training. The assay development stage concludes with the selection of a final assay format, or perhaps more than one assay format if the biomarker includes more than one type of molecule, such as proteins and metabolites. In addition to evaluating properties of the chosen assay(s), we will also evaluate any required software and algorithmic aspects of the molecular test, concluding with our selection of the preferred software format and reporting method for the test results.

Clinical Development. In the clinical development stage, we will seek to demonstrate that the assay we have chosen accurately and reproducibly measures the biomarker and that the biomarker measurement provides clinically meaningful results. This involves conducting one or more studies with appropriate endpoints to collect samples that can be used to validate the assay and to qualify the biomarker. When feasible, we will aim to conduct prospective studies in a cost-effective setting that resembles typical circumstances where our tests may be used, such as in working with third-party payors for recruitment of study participants. Once the clinical study has been completed, the samples are available for further testing. These clinical studies, also known as qualification studies, provide the data that will be required by the FDA and confirmation of the performance characteristics of the molecular diagnostic test and, together with all other study and assay information, form the basis for seeking regulatory clearance.

Regulatory Preparation and Submission. Throughout the development process we plan to proactively interact with the FDA to determine the development plan and protocols. We believe that early and frequent consultation with the FDA will reduce development risks and allow us to consider the probability of regulatory acceptance of our approach and submission. Upon completion of clinical studies and assay development, we will compile data and prepare the submission in accordance with the applicable regulations. We intend to structure our regulatory submissions to be consistent with our strategy for commercializing the product.

Launch

Market Planning. At this stage, we will prepare our new molecular diagnostic product for launch in one or more markets. We will determine an appropriate commercialization plan for each specific product, and we will pursue one or a combination of the following approaches: a laboratory testing service, direct product sales or out-licensing. See "Business Our Commercialization Strategy." If we have chosen to out-license the test, we would likely rely on our licensee to make most of the

commercial preparations for launch. If we are preparing for either the laboratory service or direct sales approach, we will ensure that an appropriate commercial infrastructure, as well as laboratory or manufacturing operating procedures, are in place during this stage. In addition, we expect to direct our marketing resources and efforts to numerous key areas, including opinion leader and speaker development, marketing and distribution partner relationships, scientific publications and presentations, medical community and third-party payor outreach, reimbursement, sales preparedness, product packaging, production requirements, and advertising and promotion.

Although the majority of our biomarker projects will generally include these stages, the sequence of the stages may be slightly different, and the specifics within a stage may differ from what is outlined. For example, under certain circumstances a single clinical study may provide samples for discovery, verification and clinical development, thus shortening the overall development timeline.

Intellectual Property

The focus of our work is in the field of systems biology, its application to the discovery of biomarkers and the development of molecular diagnostic tests based on biomarkers. Through our research and development efforts, we have developed expertise in proprietary methods relating to experimental design, biological sample preparation, high throughput bioanalyses exploiting high-performance liquid chromatography and mass spectrometry, data normalization, statistical analyses, integration of diverse instrument-generated data sets, the use of specialized bioinformatic methods to interpret data sets, and quality assurance and control. We maintain and protect these methods as trade secrets and, in some cases, by filing patent applications.

We expect to protect our biomarker discoveries and our diagnostic tests based on these biomarkers primarily through patents, to the extent possible. The use of patents to protect proprietary methods and discoveries in the area of molecular biomarkers and to protect the use of such methods and biomarkers in diagnostic and prognostic tests is well-established in most countries. Because we use an empirical rather than a hypothesis driven approach to biomarker discovery, we measure thousands of different molecules in each patient sample. We are thus able to identify multiple biomarkers and biomarker combinations that correlate with the clinical data of interest. We believe that this will enable us to file and obtain broad patent claims for our biomarker discoveries and for molecular diagnostic tests based on these discoveries.

As of November 30, 2007, we have a license to commercialize technology covered by two issued U.S. patents and their foreign counterparts. We also own or have a license to commercialize technology covered by an additional 16 pending patent applications, filed first either with the U.S. Patent and Trademark Office or under the Patent Cooperation Treaty, and their foreign counterparts. We file patent applications in countries or regions that we consider to be strategic to our business, including the United States, Europe, Canada, Australia, Japan and other countries, or we file international applications under the PCT reserving our right to file such applications. Of these patents and pending patent applications, five families of related application are directed to methods underlying our technology platform, five families cover biomarker discoveries that are related to diagnostic product opportunities and two families cover therapeutic methods. We intend, where appropriate, to file additional patent applications and to in-license additional patents relating to new technologies, discoveries or products. A description of specific intellectual property rights related to some of our product candidates is contained in "Business Our Leading Product Candidates".

In addition to our internal biomarker discovery and diagnostic product development efforts, for which we expect to obtain exclusive rights, we participate in a CRADA for the Liver Toxicity Biomarkers Study, through which we expect to obtain rights to patented subject matter. We also have certain rights to intellectual property under our other initiatives and collaborations as described in "Business Our Initiatives" and "Business Our Collaborations."

We maintain a policy of requiring our employees and consultants to execute confidentiality and invention assignment agreements upon commencement of their relationships with us. These agreements are designed both to enable us to protect and maintain the confidentiality of our trade secret information by prohibiting unauthorized disclosure or use of our technology, and to secure title to technology developed by us or on our behalf so that it may be protected through patent filings or other means.

Competition

The molecular diagnostics industry is highly competitive and subject to rapid change. Our competitors include a number of large, well-established diagnostic companies and laboratory service providers, as well as an increasing number of new companies entering the market. Many of these competitors have financial and other resources substantially greater than our own. In addition, many of our competitors have substantially greater experience in developing and commercializing diagnostic products than we have.

Established diagnostics companies, such as Abbott Laboratories, Beckman Coulter, F. Hoffmann-La Roche, General Electric, Johnson & Johnson, Mitsubishi, Philips and Siemens have expanded into the molecular diagnostics area to complement their legacy routine testing businesses. In addition, commercial laboratories with extensive service networks for diagnostic tests, such as Laboratory Corporation of America and Quest Diagnostics, have expanded their testing capabilities to include molecular diagnostics. Specialized laboratories, such as Genzyme Genetics and Myriad Genetic Laboratories, also offer molecular diagnostic testing services.

Recent entrants to the field include companies that have developed new enabling technologies. We have identified a number of companies with competing technologies and approaches in molecular diagnostics. Companies that may compete with us in our current areas of focus, cardiovascular disease, oncology and CNS, include Agendia, Athena Diagnostics, Biosite, Celera Group of Applera Corporation, Dako, diaDexus, Genomic Health, Oncomethylome Sciences and Vermillion.

We believe that we will compete primarily on the basis of the following characteristics:

our technology platform and our ability to create new molecular diagnostics;

the speed with which our development platform can discover, develop and validate products;

our access to samples to validate our tests currently in development;

our relationships with pharmaceutical companies and third-party payors; and

our ability to protect our intellectual property and commercialize our tests.

Regulatory

Our Regulatory Strategy

We consider all of our molecular diagnostic tests currently under development, whether delivered as a laboratory service or an *in vitro* diagnostic kit, to be subject to regulatory review in the United States, European Union member states and other countries. The FDA recommends that sponsors such as us interact with the agency early and often in the development of these types of diagnostic products. We intend to follow this recommendation to reduce development risks and facilitate the regulatory process. In light of the importance of the U.S. market for our potential products, and because of the opportunity to seek and receive early FDA advice and input on the development program, we will prioritize U.S. regulatory plans and submissions over other jurisdictions. In addition, we intend to identify opportunities to prepare and submit applications to European Union member states in

compliance with EU-Directive 98/79/EC and other applicable standards. We plan to prioritize European Union member states based on market size, regulatory approvals and other considerations.

U.S. Regulations

Food and Drug Administration

The type of regulation to which our products will be subject will depend in large part on how we intend to commercialize our products. Products that will be commercialized through direct product sales as *in vitro* diagnostic kits will be subject to review by the FDA and must be cleared or approved before they can be marketed. Because the FDA regulates certain laboratory services as devices, we plan to seek FDA clearance or approval for all of our molecular diagnostic tests currently under development that will be offered only as a service through our own or other clinical laboratories.

The FDA regulates the sale or distribution of medical devices, including *in vitro* diagnostic test kits. The information that must be submitted to the FDA in order to obtain clearance or approval to market a new medical device varies depending on how the medical device is classified by the FDA. Medical devices are classified into one of three classes on the basis of the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness. Class I devices are subject to general controls, including labeling, pre-market notification and adherence to FDA's quality system regulation, which are device-specific good manufacturing practices. Class II devices are subject to general controls and special controls, including performance standards and post-market surveillance. Class III devices are subject to most of the previously identified requirements as well as to pre-market approval. Most *in vitro* diagnostic kits are regulated as Class I or II devices and are either exempt from pre-market notification or require a 510(k) submission as described below.

510(k) Pre-Market Notification

A 510(k) notification requires the sponsor to demonstrate that a medical device is substantially equivalent to another marketed device that is legally marketed in the United States and for which a pre-market approval, or PMA, was not required. It does not generally require supporting clinical data. A device is substantially equivalent to a predicate device if it has the same intended use and technological characteristics as the predicate; or has the same intended use but different technological characteristics, where the information submitted to the FDA does not raise new questions of safety and effectiveness and demonstrates that the device is at least as safe and effective as the legally marketed device.

The FDA's performance goal review time for a 510(k) application is 90 days from the date of submission. However, in practice, clearance often takes longer. The FDA may require information regarding clinical data in order to make a decision regarding the claims of substantial equivalence. Unlike with biopharmaceutical products, clinical trials in support of diagnostic products do not follow a pre-determined set of phases (i.e., Phases I-III). Rather, *in vitro* diagnostic clinical trials are typically distinguished based on the primary objective of obtaining analytical or clinical performance data, rather than safety or efficacy data. If the FDA does not believe the device is substantially equivalent to a predicate device, it will issue a "Not Substantially Equivalent" letter and designate the device as Class III, which will require approval of a PMA application in order to be marketed.

Pre-Market Approval

The PMA process consists of a scientific and regulatory review to evaluate the safety and effectiveness of Class III medical devices. The PMA process is considerably more time consuming and expensive than the 510(k) route, and the application must be supported by scientific evidence, including clinical data, to demonstrate the safety and efficacy of the medical device for its intended purpose.

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The FDA's performance goal review time for a PMA is 180 days, although in practice this review time is longer. Questions from the FDA, requests for additional data and referrals to advisory committees may delay the process considerably. Indeed, the total process may take several years and there is no guarantee the PMA will ever be approved, or if approved, the FDA may limit the market to which the device may be marketed. The FDA may also request additional clinical data as a condition of approval or after the PMA is approved. Any changes to the medical device may require a supplemental PMA to be submitted and approved.

Laboratory Developed Tests

Although the FDA has consistently claimed that it has the regulatory authority to regulate laboratory-developed tests that are validated by the developing laboratory and has imposed labeling requirements for the results of tests utilizing analyte-specific reagents, it has generally exercised enforcement discretion in not otherwise regulating most tests performed by high complexity CLIA-certified laboratories. In recent years, the FDA indicated that it was reviewing the regulatory requirements that will apply to laboratory-developed tests, and in September 2006, the FDA published a draft guidance document, which it revised in September 2007, or the Draft Guidance, that may be relevant to some of the tests we develop. The Draft Guidance describes the FDA's current position regarding potential regulation of *In Vitro* Diagnostic Multivariate Index Assays, or IVDMIAs, and the revision provided additional examples of the types of tests that would be subject to the Draft Guidance. An IVDMIA is a test system that employs data, derived in part from one or more *in vitro* assays, and an algorithm that usually, but not necessarily, runs on software, to generate a result that diagnoses a disease or condition or is used in the cure, mitigation, treatment, or prevention of disease.

In February 2007, the FDA cleared a 510(k) submission for Agendia's MammaPrint® breast cancer prognosis test as the first IVDMIA cleared since the first version of the Draft Guidance was published. The clearance of this complex test, based on profiling of 70 genes to determine if chemotherapy is warranted, suggests that the 510(k) route is the likely route for most, if not all, of the molecular diagnostics we are targeting currently. Nevertheless, the FDA may require us to submit PMAs for our pipeline products. We intend to conduct early and ongoing dialog with the FDA on each of our pipeline product candidates in order to obtain clarity around the classification and requirements prior to the commencement of larger-scale studies.

The first version of the Draft Guidance and related discussions about IVDMIAs have attracted the attention of the Congress, and in March 2007, the Laboratory Test Improvement Act was introduced in the Senate. The bill, if enacted into law, would mandate that all providers of laboratory-developed tests provide evidence to the FDA that verifies the analytical validity of such tests. It would also require the development of a mechanism for the enhanced reimbursement of cleared and approved IVD products and laboratory-developed tests. The bill was referred to committee and no further action had been taken as of September 30, 2007.

CLIA

Laboratories that perform testing on human specimens for the purpose of providing information for diagnosis, prevention or treatment of disease or assessment of health are subject to the Clinical Laboratory Improvement Amendments of 1988, or CLIA. This law imposes quality standards for laboratory testing to ensure the accuracy, reliability and timeliness of patient test results. The FDA is responsible for the categorization of commercially marketed IVD tests under CLIA into one of three categories based upon the potential risk to public health in reporting erroneous results. The categories were devised on the basis of the complexity of the test include waived tests, tests of moderate complexity, and tests of high complexity. Laboratories performing moderate- or high-complexity testing must meet the FDA requirements for proficiency testing, patient test management, quality control, quality assurance and personnel.

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In the event that we choose to set up a clinical laboratory to offer a testing service, we will be required to hold certain federal, state and local licenses, certifications and permits to conduct our business. Any clinical laboratory with which we might contract would also be subject to these same requirements. Under CLIA, we will be required to hold a certificate applicable to the type of work we perform and to comply with standards covering personnel, facilities administration, quality systems and proficiency testing. We believe that some of the tests that we are developing will be high-complexity tests. CLIA certified laboratories are typically subject to survey and inspection every two years to assess compliance with program standards.

We may also seek accreditation by the College of American Pathologists, or CAP, and licensed by some states. The CAP Laboratory Accreditation Program is an internationally recognized program that utilizes teams of practicing laboratory professionals as inspectors, and accreditation by CAP can often be used to meet CLIA and state certification requirements.

HIPAA and Other Privacy Laws

The Health Insurance Portability and Accountability Act of 1996, or HIPAA, established for the first time comprehensive protection for the privacy and security of health information. The HIPAA standards apply to three types of organizations, or "Covered Entities": health plans, healthcare clearing houses, and healthcare providers which conduct certain healthcare transactions electronically. Covered Entities must have in place administrative, physical, and technical standards to guard against the misuse of individually identifiable health information. Additionally, some state laws impose privacy protections more stringent than HIPAA. Most of the institutions and physicians from which we obtain biological specimens that we use in our research and validation work are Covered Entities and must obtain proper authorization from their patients for the subsequent use of those samples and associated clinical information. We are not presently a Covered Entity subject to HIPAA; however, we may become a Covered Entity in the future when we conduct clinical studies or provide laboratory testing services.

Our activities must also comply with other applicable privacy laws. For example, there are also international privacy laws that impose restrictions on the access, use, and disclosure of health information. All of these laws may impact our business. Our failure to comply with these privacy laws or significant changes in the laws restricting our ability to obtain tissue samples and associated patient information could significantly impact our business and our future business plans.

European Regulations

In the European Union, IVD medical devices are regulated under EU-Directive 98/79/EC, or the IVD Directive, and corresponding national provisions. The IVD Directive requires that medical devices meet the essential requirements set out in an annex of the directive. These requirements include the safety and efficacy of the devices. According to the IVD Directive, the Member States presume compliance with these essential requirements in respect of devices which are in conformity with the relevant national standards transposing the harmonized standards of which the reference numbers have been published in the Official Journal of the European Communities. These harmonized standards include ISO 13485:2003, the quality standard for medical device manufacturers.

IVD medical devices, other than devices for performance evaluation, must bear the CE marking of conformity when they are placed on the market. The CE mark is a declaration by the manufacturer that the product meets all the appropriate provisions of the relevant legislation implementing the relevant European Directive. As a general rule, the manufacturer must follow the procedure of the EC Declaration of conformity to obtain this CE marking.

Each European country must adopt its own laws, regulations and administrative provisions necessary to comply with the IVD Directive. Member States may not create any obstacle to the placing on the market or the putting into service within their territory of devices bearing the CE marking according to the conformity assessment procedures.

Development. Article 152 of the EC-Treaty requires a high level of human health protection to be ensured in the definition and implementation of all Community policies and activities. Community action, which complement national policies, must be directed towards improving public health, preventing human illness and diseases, and obviating sources of danger to human health. On the basis of article 152(4)(a) of the EC-Treaty, the European Legislator is required to contribute to the achievements of these objectives through adopting measures setting high standards of quality and safety of organs and substances of human origin, blood and blood derivatives. These measures, however, may not prevent any Member State, however, from maintaining or introducing more stringent protective measures.

The use of bodily material, which already has been taken from humans, is not regulated by the European Legislator through specific directives. However, in the European Union the protection of individuals with regard to the processing of personal data is regulated under EU-Directive 95/46/EC, or the PD Directive. If specimens (such as blood plasma and urine) taken from patients relate to an identified or identifiable natural person, the use of such specimens fall within the scope of the PD Directive.

Member States prohibit the processing of personal data concerning health, unless processing of the data is required for the purposes of preventive medicine, medical diagnosis, the provision of care or treatment or the management of health-care services, and where those data are processed by a health professional subject under national law or rules established by national competent bodies to the obligation of professional secrecy or by another person also subject to an equivalent obligation of secrecy.

Individual European countries are free to further restrict the collection and the use of such bodily material.

Reimbursement

United States

In the United States, revenue for molecular diagnostic tests comes from several sources, including commercial health insurers, such as insurance companies and health maintenance organizations; government health administrative authorities, such as Medicare and Medicaid; patients; and, in certain circumstances, hospitals or referring laboratories (who then bill health third-party payors for testing). If we offer our diagnostic tests as a service through our own certified laboratory or contract laboratory, we would be responsible for billing and collection of fees for the tests. Otherwise, billing and collection would be the responsibility of the companies that purchase or license our products.

Code Assignment. In the United States, a third-party payor's decisions regarding coverage and payment are driven, in large part, by the specific Current Procedural Terminology, or CPT, code used to identify a test. The American Medical Association, or AMA, publishes the CPT, which is a listing of descriptive terms and identifying codes for reporting medical services and procedures. The purpose of the CPT is to provide a uniform language that accurately describes medical, surgical, and diagnostic services and therefore to ensure reliable nationwide communication among healthcare providers, patients, and third-party payors.

A manufacturer of *in vitro* diagnostic kits or a provider of laboratory services may request establishment of a Category I CPT code for a new product. Assignment of a specific CPT code ensures routine processing and payment for a diagnostic test by both private and government third-party payors.

The AMA has specific procedures for establishing a new CPT code and, if appropriate, for modifying existing nomenclature to incorporate a new test into an existing code. If the AMA concludes that a new code or modification of nomenclature is unnecessary, the AMA will inform the requestor how to use one or more existing codes to report the test.

While the AMA's decision is pending, billing and collection may be sought under an existing, non-specific CPT code. A manufacturer or provider may decide not to request assignment of a CPT code and instead use an existing, non-specific code for reimbursement purposes. However, use of such codes may result in more frequent denials and/or requests for supporting clinical documentation from the third-party payor and in lower reimbursement rates, which may vary based on geographical location.

Coverage Decisions. When deciding whether to cover a particular diagnostic test, private and government third-party payors generally consider whether the test is a covered benefit and, if so, whether it is reasonable and necessary for the treatment of illness and injury. Most third-party payors do not cover experimental services. Coverage determinations often are influenced by current standards of practice and clinical data, particular at the local level. The Centers for Medicare & Medicaid Services, or CMS, which is the government agency responsible for overseeing the Medicare program, has the authority to make coverage determinations on a national basis, but most Medicare coverage decisions are made at the local level by the contractors, known as "carriers" and "fiscal intermediaries", that administer the Medicare program in specified geographic areas. Private and government third-party payors have separate processes for making coverage determinations, and private third-party payors may or may not follow Medicare's coverage decisions. If a third-party payor has a coverage determination in place for a particular diagnostic test, billing for that test must comply with the established policy. Otherwise, the third-party payor makes reimbursement decisions on a case-by-case basis.

Payment. Payment for covered diagnostic tests is determined based on various methodologies, including prospective payment systems and fee schedules. In addition, private third-party payors may negotiate contractual rates with participating providers or set rates as a percentage of the billed charge. Diagnostic tests furnished to Medicare inpatients generally are included in the bundled payment made to the hospital under Medicare's Inpatient Prospective Payment System. Payment for diagnostic tests furnished to Medicare beneficiaries in most other circumstances is made based on the Clinical Laboratory Fee Schedule, under which a payment amount is assigned to each covered CPT code. The law technically requires fee schedule amounts to be adjusted annually by the percentage increase in the consumer price index, or CPI, for the prior year, but Congress has frozen payment rates through 2008. In addition, the law imposes a ceiling on fee schedule amounts. Currently, the ceiling for established tests is set at 74% of the median of all carrier fee schedule amounts for a particular test and 100% of the median for diagnostic tests for which no limitation amount was established prior to 2001. Medicaid programs generally pay for diagnostic tests based on a fee schedule, but reimbursement varies by state.

European Union

In the European Union the reimbursement mechanisms used by private and public health insurers vary by country. For the public systems reimbursement is determined by guidelines established by the legislator or responsible national authority. As elsewhere, inclusion in reimbursement catalogues focuses on the medical usefulness, need, quality and economic benefits to patients and the health-care system. Acceptance for reimbursement comes with cost, use and often volume restrictions, which again can vary by country.

Legal Proceedings

We are not currently subject to any material legal proceedings.

Facilities

We lease approximately 22,000 square feet of office and laboratory space at 610 Lincoln Street North, Waltham, Massachusetts 02451, with a term expiring in June 2008. In December 2007, we exercised our option to extend the lease until June 2009 pursuant to the terms of the agreement. We also rent a small office in Amsterdam, the Netherlands on a month-to-month basis through our wholly owned subsidiary, BG Medicine N.V., incorporated in June 2007.

We believe that our facilities are adequate to meet our current needs, although if additional space is needed in the future, we believe that such space will be available on commercially reasonable terms.

Employees

As of September 30, 2007, we had 41 full-time employees and one part-time employee. At that time, 21 of our employees had advanced degrees, 29 were engaged in research and development and 12 performed general and administrative functions. We consider our relationship with our employees to be good.

MANAGEMENT

Board of Directors

Our directors and their respective ages and positions as of September 30, 2007 are as follows:

Name	Age	Position
Noubar Afeyan, Ph.D.	45	Chairman of the Board
Harrison M. Bains ⁽¹⁾	64	Director
Joseph Davie, M.D., Ph.D. ⁽²⁾	67	Director
Timothy Harris, Ph.D. ⁽¹⁾⁽²⁾	57	Director
Pieter Muntendam, M.D.	49	President, Chief Executive Officer and Director
Stelios Papadopoulos, Ph.D. ⁽¹⁾⁽³⁾	59	Vice Chairman of the Board
Pieter van der Meer, M.Sc. ⁽²⁾⁽³⁾	37	Director
Daniel Wang, Ph.D. ⁽³⁾	71	Director

- (1) Member of our Audit Committee. Mr. Bains is the chairman of the committee.
- (2) Member of our Compensation Committee. Dr. Harris is the chairman of the committee.
- (3) Member of our Nominating and Governance Committee. Dr. Papadopoulos is the chairman of the committee.

Noubar Afeyan, Ph.D., Chairman of the Board. Dr. Afeyan is one of our co-founders and has served on our board of directors since our inception in 2000. He is Managing Partner and Chief Executive Officer of Flagship Ventures, an early stage venture capital firm. Prior to founding Flagship Ventures in 1999, Dr. Afeyan participated in co-founding and helping launch six new ventures: PerSeptive Biosystems, ChemGenics Pharmaceuticals, EXACT Sciences, Antigenics, Color Kinetics and Celera Genomics. Dr. Afeyan currently serves as a director of Helicos Biosciences, as well as the following private companies: Adnexus Therapeutics, Inc., Affinova, Inc., BIND Biosciences, Inc., Codon Devices, Inc., Ensemble Discovery Corp., Genstruct, Inc., T2 Biosystems, Inc. and LS9, Inc. He earned his Ph.D. in biochemical engineering from the Massachusetts Institute of Technology (MIT) following a B.S. in chemical engineering from McGill University. Dr. Afeyan has authored numerous scientific publications and patents and is currently a Senior Lecturer at MIT in both the Sloan School of Management and the Biological Engineering department.

Harrison M. Bains, Director. Mr. Bains joined our board of directors in June 2007. Mr. Bains served as Vice President and Treasurer of Bristol Myers Squibb Company from 1988 until his retirement in 2004. Mr. Bains' career also includes serving as Senior Vice President of the Primary Industries Group at Chase Manhattan Bank in 1987 and 1988 and 11 years with RJR Nabisco and two of its predecessor companies as Senior Vice President and Treasurer. Mr. Bains earned an M.B.A. from the University of California, Berkeley and a B.A. in economics from the University of Redlands. He also completed the Advanced Management Program at Harvard Business School. Mr. Bains serves on the board of directors and is the chair of the audit committee of MGI Funds, Inc. He is a member of the boards of trustees of the University of Redlands, the Overlook Hospital Foundation and the Greater Newark Conservancy.

Joseph Davie, M.D., Ph.D., Director. Dr. Davie has served on our board of directors since 2000 after holding positions as Senior Vice President, Department of Research at Biogen, Inc. from 1993 to 2000 and Corporate Senior Vice President, Science and Technology, at G.D. Searle & Co. from 1987 to 1993. Prior to holding these positions, Dr. Davie was Head of the Department of Microbiology and Immunology at Washington University School of Medicine, St. Louis, Missouri from 1972 to 1987. Dr. Davie is currently a partner in Midwest Warehousing LLC and serves on the boards of directors of Targeted Genetics Corporation, Curis, Inc., CV Therapeutics, Inc., Inflazyme Pharmaceuticals, Ltd.,

Keel Pharmaceuticals, Inc., Stratatech Corporation and Ocera Therapeutics, Inc. Dr. Davie received his Ph.D. in bacteriology from Indiana University and his M.D. from Washington University School of Medicine.

Timothy Harris, Ph.D., Director. Dr. Harris joined our board of directors in April 2007. Dr. Harris has served as the Director of the Advanced Technology Program at SAIC Frederick since 2007. Prior to holding this position, he served as the President & Chief Executive Officer of Novasite Pharmaceuticals Inc. from 2005 to 2006. Prior to this, he served as Chief Executive Officer for Structural GenomiX, Inc. (now SGX Pharmaceuticals, Inc.), a drug discovery and development company focused on innovative cancer therapeutics from 2003 to 2004 and as its President and Chief Executive Officer from 1999 to 2003. Dr. Harris started his career in biotechnology in 1981 as a group leader in Molecular Biology at Celltech Group and from 1989 to 1993 was Director of Biotechnology at Glaxo Group Research in the UK. From 1993 until 1999, Dr. Harris was Chief Scientific Officer and Vice President of Research and Development at Sequana Therapeutics Inc. in San Diego, which became Axys Pharmaceuticals, Inc. in 1998. Dr. Harris serves on the boards of directors of Novation Pharmaceuticals, Inc. and Origen Therapeutics, Inc. Dr. Harris received his Ph.D. in molecular virology from the University of Birmingham, UK.

Pieter Muntendam, M.D., President, Chief Executive Officer and Director. Dr. Muntendam joined us as President in November 2004 and was appointed as Chief Executive Officer in December 2005. He also has served as a member of our board of directors since November 2004. He is a biopharmaceutical and healthcare executive with over 20 years of business experience ranging from early stage enterprises to multinational corporations. Dr. Muntendam joined us from NetNumina Solutions, Inc., a professional services company, where he served as Director of the Biopharma Healthcare Practice from April 2003 to October 2004. Prior to joining NetNumina, he co-founded Vitivity Inc., a subsidiary of Millennium Pharmaceuticals, Inc., and served as Vice President, Medicine from July 2001 to April 2003. He founded the health management firm ProMedex Inc. in 1996, where he served as President & Chief Executive Officer and chairman of the board until ProMedex was acquired by Landacorp, Inc. in 2001. Prior to that, he served as Vice President of Care Management at Glaxo Wellcome (now GlaxoSmithKline plc), where he was responsible for the development and implementation of its entry strategy within the field of care and disease management. Dr. Muntendam began his career with Organon International Inc. in December of 1982, after which he was appointed Vice President of Research and Development, International at Johnson & Johnson, and appointed as a member of the boards of directors for two Johnson & Johnson operating companies. Dr. Muntendam received his M.D. from Leiden University in the Netherlands.

Stelios Papadopoulos, Ph.D., Vice Chairman of the Board. Dr. Papadopoulos has served on our board of directors since 2003 and the Vice Chairman of our board of directors since April 2007. He is currently Chairman of Fondation Sante, a private charitable foundation whose mission is to improve the health and education of those in need, whether countries, regions or individuals. Dr. Papadopoulos served as Vice Chairman of Cowen and Company, LLC from 2003 until 2006. Prior to this, he worked for Cowen and Company, LLC as an investment banker focused on the biotech and pharmaceutical sectors beginning in 2000. Prior to joining Cowen and Company, LLC, he worked as an investment banker at PaineWebber, Incorporated, from 1987 to 2000, where he was most recently Chairman of PaineWebber Development Corp., a PaineWebber subsidiary focusing on biotechnology from 1996 to 2000. Dr. Papadopoulos is a co-founder and Chairman of the Board of Exelixis, Inc., and he is a co-founder and member of the boards of directors of Anadys Pharmaceuticals, Inc. and Cellzome, Inc. Dr. Papadopoulos holds a Ph.D. in biophysics and an M.B.A. in finance, both from New York University.

Pieter van der Meer, M.Sc., Director. Mr. van der Meer has served on our board of directors since 2002. He is General Manager of Gilde Healthcare Partners, a venture capital firm, where he

focuses on start-up and early stage investments in healthcare companies with novel technologies, platforms and drug discovery approaches. Mr. van der Meer represents Gilde on the boards of directors of several portfolio companies, including Agendia B.V. and Ablynx Nv. He is also a member of the project screening committee at Amsterdam & Leiden Universities. Mr. van der Meer joined Gilde in 1998 after working several years with KPMG Management Consulting, where he was closely involved with due diligence and strategic projects in venture capital and the pharmaceutical sector across Europe. Mr. van der Meer earned his M.Sc. in chemistry at Leiden University where he specialized in bio-organic synthesis and molecular modeling.

Daniel Wang, Ph.D., Director. Dr. Wang has served on our board of directors since 2000. Dr. Wang is the Institute Professor of Chemical Engineering at MIT. Dr. Wang's current work as Institute Professor of Chemical Engineering includes research into the production of recombinant proteins, glycoprotein quality and protein stabilization. He has numerous publications and awards, including the Amgen Biochemical Engineering Award, 1995. He was elected to the National Academy of Engineering, 1986 and American Academy of Arts and Sciences, 1985. In addition, Dr. Wang serves on the boards of directors of Codexis, Inc., Epitec Biosystem, Inc. and A-Bio Pharma Pte, Ltd. Dr. Wang earned his Ph.D. at the University of Pennsylvania, and his B.S. and M.S. degrees at MIT.

Board Composition

Our restated certificate of incorporation to be filed upon completion of this offering and restated bylaws to be effective upon completion of this offering provide that the authorized number of directors may be changed only by resolution of the board of directors. We currently have eight directors. In accordance with our restated certificate of incorporation to be filed upon completion of this offering and restated bylaws to be effective upon completion of this offering, our board of directors will be divided into three classes with staggered three-year terms upon the filing of our restated certificate of incorporation following the completion of this offering. At each annual meeting of stockholders commencing with the meeting in 2008, the successors to the directors whose terms then expire will be elected to serve until the third annual meeting following the election. At the closing of this offering, our directors will be divided among the three classes as follows:

The Class I directors will be Dr. Harris and Dr. Muntendam and their terms will expire at the annual meeting of stockholders to be held in 2008;

The Class II directors will be Mr. Bains, Dr. Davie and Dr. Wang and their terms will expire at the annual meeting of stockholders to be held in 2009; and

The Class III directors will be Dr. Afeyan, Dr. Papadopoulos and Mr. van der Meer and their terms will expire at the annual meeting of stockholders to be held in 2010.

Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors.

Director Independence

Our board of directors has reviewed the materiality of any relationship that each of our directors has with us, either directly or indirectly. Based on this review, our Board has determined that the following directors are "independent directors" as defined by the NASDAQ Stock Market LLC, or NASDAQ: Mr. Bains, Mr. van der Meer, Dr. Davie, Dr. Harris, Dr. Papadopoulos and Dr. Wang.

Committees of the Board of Directors

Our board of directors has an audit committee, a compensation committee, and a nominating and governance committee. The composition and function of each of these committees are described below.

Audit Committee. Our audit committee is comprised of Mr. Bains (chairman), Dr. Harris and Dr. Papadopoulos. Our board of directors has determined that Mr. Bains is an audit committee financial expert, as defined by the rules of the Securities and Exchange Commission. Our audit committee is authorized to:

- approve and retain the independent auditors to conduct the annual audit of our financial statements;
- review the proposed scope and results of the audit;
- review and pre-approve audit and non-audit fees and services;
- review accounting and financial controls with the independent auditors and our financial and accounting staff;
- review and approve transactions between us and our directors, officers and affiliates;
- recognize and prevent prohibited non-audit services; and
- establish procedures for complaints received by us regarding accounting matters; oversee internal audit functions, if any.

We believe that the composition of our audit committee meets the independence requirements of the applicable rules of the Securities and Exchange Commission and NASDAQ on the date of this prospectus.

Compensation Committee. Our compensation committee is comprised of Dr. Harris (chairman), Dr. Davie and Mr. van der Meer. All members of the compensation committee qualify as independent under the current definition promulgated by NASDAQ. Our compensation committee is authorized to:

- review and recommend the compensation arrangements for management;
- establish and review general compensation policies with the objective to attract and retain superior talent, to reward individual performance and to achieve our financial goals; and
- administer our stock incentive plans.

Nominating and Governance Committee. Our nominating and governance committee is comprised of Dr. Papadopoulos (chairman), Mr. van der Meer and Dr. Wang. All members of the nominating and governance committee qualify as independent directors under the current definition promulgated by NASDAQ. Our nominating and governance committee is authorized to:

- identify and nominate candidates for election to the board of directors;
- develop and recommend to the board of directors a set of corporate governance principles applicable to our company; and

oversee the evaluation of the board of directors and management.

Compensation Committee Interlocks and Insider Participation

No member of our compensation committee has at any time been an employee of ours. None of our executive officers serves as a member of our board of directors or compensation committee of any other entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Executive Officers

Our executive officers and their respective ages and positions with us as of September 30, 2007 are as follows:

Name	Age	Position
Pieter Muntendam, M.D.	49	President, Chief Executive Officer and Director
Mark D. Shooman	60	Chief Financial Officer and Treasurer
Stephen A. Martin, Ph.D.	50	Executive Vice President and Chief Technology Officer
Robert N. McBurney, Ph.D.	59	Senior Vice President, Research and Development and Chief Scientific Officer

Pieter Muntendam, M.D., *President, Chief Executive Officer and Director.* Dr. Muntendam's biography is set forth above under "Management Board of Directors."

Mark D. Shooman, *Chief Financial Officer and Treasurer.* Mr. Shooman joined us in May 2007. Prior to joining us, Mr. Shooman worked with ONI Medical Systems, Inc. beginning in 2006, where he was Chief Financial Officer. Mr. Shooman served as Senior Vice President and Chief Financial Officer of Clinical Data, Inc., a publicly held company specializing in pharmacogenomics and medical diagnostics from 2003 to 2006. He also served as Vice President and Chief Financial Officer of ADE Corporation, a semiconductor equipment company, for which he coordinated an initial public offering and a follow-on offering. Mr. Shooman has over 15 years in public accounting and holds a BSEE degree from Rensselaer Polytechnic Institute and an M.B.A. from The Ohio State University, and is a Certified Public Accountant.

Stephen A. Martin, Ph.D., *Executive Vice President and Chief Technology Officer.* Dr. Martin joined us in 2004. In 2000, Dr. Martin founded and was a Senior Director of the Proteomics Research Center at Applied Biosystems Group in Framingham, Massachusetts. This research group focused on developing complete workflows with collaborators in a variety of applied markets, identifying gaps in these approaches and conducting basic research to better understand the key technologies that would revolutionize these fields. Prior to forming the Proteomics Research Center, Dr. Martin was responsible for research and development in Mass Spectrometry at PerSeptive Biosystems Inc./Applied Biosystems Group from 1994 to 2000. Dr. Martin serves on the board of directors of Stillwater Scientific Instruments. Dr. Martin received his B.A. in chemistry from Boston University in 1980 and his Ph.D. in analytical chemistry from MIT in 1984.

Robert N. McBurney, Ph.D., *Senior Vice President, Research & Development and Chief Scientific Officer.* Dr. McBurney joined us in 2003, following his position as Founder, President and Chief Executive Officer of Differential Proteomics, Inc., a start-up proteomics company. He also formerly held the positions of President of CeNeS Pharmaceuticals, Inc. and Chief Scientific Officer and President of Cambridge NeuroScience, Inc. from 1993 to 2001. Dr. McBurney currently serves on the board of directors of Differential Proteomics, Inc. Dr. McBurney's former academic positions include: Assistant Director of the Medical Research Council Neuroendocrinology Unit; Reader in Neurobiology at the Medical School of the University of Newcastle-upon-Tyne; Florey Fellow of the Royal Society in Sir Alan Hodgkin's laboratory at Cambridge University; Visiting Associate in Neurophysiology at the NIH; and the Benjamin Meaker Visiting Industrial Professor in the Medical School at Bristol University. He holds a B.Sc. and a Ph.D. from the University of New South Wales, Australia.

Limitation of Directors' and Officers' Liability and Indemnification

The Delaware General Corporation Law authorizes corporations to limit or eliminate, subject to specified conditions, the personal liability of directors to corporations and their stockholders for monetary damages for breach of their fiduciary duties. Our restated certificate of incorporation to be filed upon the completion of this offering limits the liability of our directors to the fullest extent permitted by Delaware law.

We have obtained director and officer liability insurance to cover liabilities our directors and officers may incur in connection with their services to us. Our restated certificate of incorporation to be filed upon completion of this offering and restated bylaws to be effective upon the completion of this offering also provide that we will indemnify and advance expenses to any of our directors and officers who, by reason of the fact that he or she is one of our officers or directors, is involved in a legal proceeding of any nature. We will repay certain expenses incurred by a director or officer in connection with any civil, criminal, administrative or investigative action or proceeding, including actions by us or in our name. Such indemnifiable expenses include, to the maximum extent permitted by law, attorney's fees, judgments, fines, settlement amounts and other expenses reasonably incurred in connection with legal proceedings. A director or officer will not receive indemnification if he or she is found not to have acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interest.

We have entered into agreements to indemnify our directors and officers. These agreements, among other things, will indemnify and advance expenses to our directors and officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by any such person in any action or proceeding, including any action by us arising out of such person's services as our director or officer, or any other company or enterprise to which the person provides services at our request. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers.

Such limitation of liability and indemnification does not affect the availability of equitable remedies. In addition, we have been advised that in the opinion of the Securities and Exchange Commission, indemnification for liabilities arising under the Securities Act is against public policy as expressed in the Securities Act and is therefore unenforceable.

There is no pending litigation or proceeding involving any of our directors, officers, employees or agents in which indemnification will be required or permitted. We are not aware of any threatened litigation or proceeding that may result in a claim for such indemnification.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Objectives and Philosophy of Executive Compensation Program

Our executive compensation program is administered by the compensation committee of our board of directors. The primary objective of our executive compensation program is to attract, retain and motivate executive talent. Our overall philosophy is to tie both short and long-term cash and equity incentives to the achievement of our executives against measurable corporate and individual performance objectives, and to align their incentives with the creation of value for our stockholders. The role of the compensation committee is to oversee our compensation and benefit plans and policies, administer our equity incentive plans, and review and approve annually all compensation decisions relating to all executive officers. Specifically, our executive compensation programs are designed to:

attract and retain individuals of superior ability and managerial talent;

ensure senior officer compensation is aligned with our corporate strategies, business objectives and the long-term interests of our stockholders;

increase the incentive to achieve key strategic and financial performance measures by linking incentive award opportunities to the achievement of performance goals in these areas; and

enhance the officers' incentive to maximize stockholder value, as well as promote retention of key people, by providing a portion of total compensation opportunities for senior management in the form of direct ownership in our company.

To achieve these objectives, the compensation committee implements and maintains compensation plans that tie a substantial portion of the executives' overall compensation to achievement of corporate and individual performance objectives. Specifically, base salary increases and performance bonus payments for each executive officer are primarily tied to the achievement of the corporate and individual objectives that the compensation committee has established for each executive. By contrast and complementing this approach, the compensation committee seeks to promote long-term employee retention through its use of equity awards. The compensation committee will tailor the size of equity awards to give executives who are successful in advancing corporate goals through their individual efforts increased incentives to continue to achieve this progress by giving them increased exposure to equity performance risk while simultaneously rewarding their successes.

Corporate Objectives. Our board of directors establishes our corporate objectives at the beginning of each year and these objectives are used to assess corporate performance for the year. The key strategic, corporate, financial and operational goals that may be identified by our board of directors include:

clinical diagnostic development;

targeted biomarker development;

continued intellectual property development; and

implementation of appropriate financing or business development strategies.

Individual Objectives. Individual objectives are also established at the beginning of each year by the supervisor of each executive. These objectives represent significant milestones that must be met by each executive, along with dates for achieving the milestones. Factors are identified and specified that will be used to measure success in reaching the goal or objective. Objectives are established based on the executive's principal areas of responsibility. For example, our scientific executives will have measurable objectives established for areas such as key research or scientific milestones.

Evaluations. After the completion of each fiscal year, we evaluate individual and corporate performance against stated goals for the year. Consistent with our overall compensation philosophy, each employee undergoes a performance evaluation process involving his or her direct supervisor and other senior executives to the extent appropriate. This process leads to a recommendation for annual salary increases, bonuses and equity awards, if any, which are then reviewed and approved by our compensation committee. The performance of our executive officers, after input from each of them as to their own performance, is generally assessed by our Chief Executive Officer. In the case of our Chief Executive Officer, his performance is assessed primarily by the chairman of our board of directors, with an opportunity for input from each member of our board of directors. Any annual base salary increases, equity awards and bonuses, to the extent granted, are generally implemented during the first calendar quarter of the following year.

The compensation committee evaluates individual executive performance with the goal of setting compensation at levels the committee believes are in the upper half for executives in companies of similar size and stage of development operating in the biotechnology industry, taking into account our relative performance and our own strategic goals. In order to ensure that we continue to remunerate our executives appropriately and consistent with market information, we will participate in, and review data from, certain compensation surveys, and may engage outside compensation consultants.

Role of Chief Executive Officer in Compensation Decisions. During the annual evaluation, our executive officers review and discuss with our Chief Executive Officer the achievement of their individual goals for the completed year and propose their individual goals for the upcoming year. Following the review and consultation with each executive, our Chief Executive Officer further evaluates each executive's performance in the context of our corporate goals and objectives and presents his assessment for review and approval by our compensation committee with respect to annual salary adjustments, bonuses and equity awards. Following review and consultation with our Chief Executive Officer, the compensation committee, as the administrator of our executive compensation program, exercises its discretion in making the final determinations regarding the payment of any cash bonuses for past performance, the adjustment of salaries for the upcoming year and the grant of any equity awards for our executive officers.

Compensation Consultant. In 2006, our compensation committee retained Nancy Arnosti, an independent compensation consultant, to assist in the review of our named executive officers' compensation. Our compensation committee tasked the consultant with the benchmarking of our named executive officers' salaries, bonuses and equity awards with those of peer companies and the preparation of a compensation committee calendar to help formalize the committee's pre-existing processes. To perform the benchmarking, the consultant used (i) the 2006 Radford Biotechnology Survey, and in doing so compared us to a subset of companies that are similar to us in terms of number of employees, (ii) the 2006 Compensation Study in Life Sciences, also commonly known as the J. Robert Scott Survey, and in doing so compared us to subset of privately held companies in the molecular technologies, pharmaceutical, biotechnology and medical devices industries, and (iii) the 2005 Radford Biotechnology Pre-IPO Survey, and in doing so compared us to companies that had received a similar amount of funding since inception. The names of the companies covered by the J. Robert Scott Survey are not disclosed.

Ms. Arnosti selected the following companies from the Radford Surveys as peer companies that were then used to benchmark our named executive officers' compensation components for 2006: Adherex Technologies, Inc.; Adnexus Therapeutics, Inc.; Avigen, Inc.; Biomimetic Therapeutics, Inc.; Biorexis Pharmaceutical Corporation; Cerexa, Inc.; Elixir Pharmaceuticals, Inc.; Epicet; Immuno-Designed Molecules Inc.; Metabolix, Inc.; Neuromed Pharmaceuticals Ltd.; Nucleonics Inc.; Pharmasset, Inc.; Pozen Inc.; Predix Pharmaceutical Holdings (merged with EPIX Pharmaceuticals in August 2006); Proteolix, Inc.; Receptor BioLogix, Inc.; Sirtris Pharmaceuticals, Inc.; Sonus

Pharmaceuticals, Inc.; Surface Logix, Inc.; Telos Pharmaceuticals LLC; TolerRx Inc.; Vanda Pharmaceuticals Inc.; and Vion Pharmaceuticals, Inc.

Analyzing the data from these companies, averaging data points where necessary among the three data sources used, our compensation consultant determined that for an incumbent Chief Executive Officer, a base salary of \$299,820 was at the 25th percentile, a base salary of \$320,240 was at the 50th percentile, and a base salary of \$369,500 was at the 75th percentile. For the Chief Technology Officer position, our compensation consultant determined that a base salary of \$204,342 was at the 25th percentile, a base salary of \$227,767 was at the 50th percentile and a base salary of \$276,618 was at the 75th percentile. For the Chief Scientific Officer position, our compensation consultant determined that a base salary of \$204,000 was at the 25th percentile, a base salary of \$234,000 was at the 50th percentile and a base salary of 281,840 was at the 75th percentile. At these percentile levels, the 2006 base salaries of our Chief Executive Officer and Chief Technology Officer of \$235,000 and \$200,000, respectively, were low within competitive market ranges, and the 2006 base salary of our Chief Scientific Officer of \$230,000 was average within competitive market ranges.

In deciding to perform the benchmarking at this stage in our development, our compensation committee acknowledged that benchmarking is not an ideal measure in isolation for setting executive compensation. However, it believes that benchmarking can be an important tool in the decision-making process, in light of the executive compensation program's primary objective to attract, retain and motivate executive talent in a competitive marketplace. Our compensation committee then reviewed and analyzed the intelligence provided by the consultant and made its annual compensation adjustments in November 2006.

Establishment of Individual and Corporate Objectives

In December 2005, the compensation committee established various corporate financial and non-financial goals for the performance of our named executive officers for 2006. Our corporate goals for the 2006 fiscal year were the foundation of the goals for our named executive officers. Our corporate goals, generally, are increasing our revenues; attracting additional investors and partners; maintaining and expanding our relationships with existing customers; securing and retaining talented employees; promoting awareness of biomarker discovery; and establishing our reputation as a leading provider of biomarkers for broad based pharmaceutical and diagnostic therapeutic uses. For the 2006 fiscal year, these general goals specifically included entering into a service agreement with Astra-Zeneca, forming the TB Alliance, establishing our partnership with Philips and establishing and advancing the strategic efforts of the HRP and LTBS initiatives. In each case, these specific goals were characterized by financial and non-financial elements; however, our general goal of increasing revenues significantly motivated our setting these particular goals. The compensation committee deemed the financial goals to be the most important elements of our performance in 2006, and, determined that, if they were achieved, that would likely result in an increase in stockholder value. The specific performance levels for financial goals were determined with reference to target levels in our 2006 budget, which we used to manage our day-to-day business. The targets were set by our board of directors at the beginning of the year at a level that represented an aggressive level of growth and financial performance with the intent that they would be difficult but achievable.

Non-financial goals specified demonstrable enhancement in specific portions of a named executive officer's area of management and were specifically structured for each named executive officer. Dr. Muntendam's non-financial goals were established as a result of discussions between our compensation committee and Dr. Muntendam and included the establishment of key partnerships and initiatives, expanded focus on biomarker discovery for diagnostic applications and novel approaches to prospective clinical studies. The non-financial goals for other named executive officers were established as a result of discussions between Dr. Muntendam and the other named executive officers. Dr. McBurney's non-financial goals included the advancement of our current biomarker discovery

projects, the initiation of new biomarker discovery projects and the expansion of our discovery projects into molecular diagnostic product development efforts. Dr. Martin's non-financial goals included the continued development and enhancement of our robust biomarker discovery platforms, retention and mentorship of the research and development teams and timely completion of all project milestones. Mr. Shooman was not our employee in 2006.

Although the details of non-financial objectives were specifically structured for each named executive officer, both financial and non-financial goals were required to be met to receive 100% of the annual bonus targets for each named executive officer. If financial or non-financial goals were not met, the compensation committee retained discretion to award less than 100% of the annual bonus targets or to refrain from paying any bonus and if such goals were exceeded, the compensation committee retained discretion to award amounts in excess of the annual bonus targets.

The compensation committee established the following individual performance targets for our executives for the 2006 fiscal year:

Pieter Muntendam, M.D., President, Chief Executive Officer and acting Chief Financial Officer lead the executive team in all aspects of devising, planning and executing corporate, financial and strategic business plans and objectives; identify companies to participate in the LTBS initiative; enter into a strategic partnership with a major medical device company; identify companies to fund and participate in the HRP initiative for high-risk plaque; and interface with our board of directors and existing and potential stockholders. The compensation committee determined that Dr. Muntendam achieved 90% of his individual performance targets. His target bonus level for 2006 was \$117,500, or 50% of his base salary in effect in 2006. Dr. Muntendam was paid \$34,250, comprised of \$21,150, which represented 90% of his individual bonus target, and \$13,100, which represented additional compensation in acknowledgement of his significant strides toward achieving the corporate bonus target.

Stephen A. Martin, Ph.D., EVP, Chief Technology Officer establish formal standard operating procedures for all functions in the laboratory; improve the efficiency of the laboratory by at least 25% with the existing staff; develop new procedures using proprietary technology from one of our strategic partners; and oversee timely and complete delivery of results under our biomarker discovery and analysis services agreements. The compensation committee determined that Dr. Martin achieved 95% of his individual performance targets with respect to all of these goals. His target bonus level for 2006 was \$60,000, or 30% of his base salary in effect in 2006. Dr. Martin was paid \$30,625, comprised of \$11,400, which represented 95% of his individual bonus target, and \$19,225, which represented additional compensation in acknowledgment of his contributions toward reaching the corporate bonus target.

Robert N. McBurney, Ph.D., SVP, Chief Scientific Officer manage and expand our intellectual property portfolio by, among other things, filing additional patent applications; provide scientific oversight for all partner projects; publish scientific papers and present at scientific conferences and seminars to increase marketplace awareness of our technology and the results of our discovery efforts. The compensation committee determined that Dr. McBurney achieved 90% of his individual performance targets with respect to all of these goals. His target bonus level for 2006 was \$69,000, or 30% of his base salary in effect in 2006. Dr. McBurney was paid \$24,150, comprised of \$12,420, which represented 90% of his individual bonus target, and \$11,730, which represented additional compensation in acknowledgment of his contributions toward reaching the corporate bonus target.

The compensation committee has established the following individual performance targets for our executives for the 2007 fiscal year:

Pieter Muntendam, M.D., President, Chief Executive Officer initiate and complete our initial public offering, lead the executive team in all aspects of devising, planning and executing corporate,

financial and strategic business plans and objectives; enter into CRADA with FDA to advance the LTBS initiative; enter into a strategic partnership with a major supplier of samples and health data for our discovery platform; in-license at least one biomarker for development as a molecular diagnostic product; identify additional companies to fund and participate in the HRP initiative for high-risk plaque; and interface with our board of directors and existing and potential stockholders.

Mark D. Shooman, Chief Financial Officer coordinate and execute our initial public offering; oversee facilities and administration functions; provide adequate cost and budgetary controls and timely reporting to effectively manage our finances; improve our project accounting system to provide more comprehensive information to management; work with the board of directors and specifically, the audit committee, to execute their respective duties.

Stephen A. Martin, Ph.D., EVP, Chief Technology Officer increase efficiency of our workflows to achieve an average of 120 days for the measurement and basic analysis of study samples; complete compliance with 21 CFR Part 11; manage, oversee and coordinate flow of data across all functional areas of our research and development processes; ensure high quality data and results for all projects and increase capacity of laboratory and supporting functions to meet our growing requirements.

Robert N. McBurney, Ph.D., SVP, Chief Scientific Officer manage and expand our intellectual property portfolio by, among other things, filing additional patent applications based upon results of our studies; provide project work plans and scientific oversight for internal and partner projects; publish scientific papers and present at scientific conferences and seminars to increase marketplace awareness of our technology and the results of our discovery efforts.

Elements of Executive Compensation

Executive compensation consists of the following elements:

Base Salary

Base salaries for our executives are generally established based on the scope of their responsibilities and their prior relevant background, training, and experience, taking into account competitive market compensation paid by other companies for similar positions represented in the compensation data we review for similar positions and the overall market demand for similar executives at the time of hire, taking into account competitive market compensation paid by the companies and recognizing cost of living considerations. In general, our compensation committee reviews base salaries annually, and adjusts salaries to realign them with comparable market levels and adjust them for inflation. As with total executive compensation, we believe that our executive base salaries should be targeted to fall between the 25th and 50th percentiles, approaching the 50th percentile of the range of salaries for executives in similar positions and with similar responsibilities in the biotechnology companies of similar size to us represented in the compensation data we review. An executive officer's base salary is also evaluated together with other components of the executive's compensation to ensure that the executive's total compensation is in line with our overall compensation philosophy.

Base salaries are reviewed annually as part of our performance management program and may be increased for merit reasons, based on the executive officer's success in meeting or exceeding individual performance goals and an assessment of whether significant corporate goals were achieved. We also assess whether there are any significant differences in how a person is compensated compared to industry benchmarks by utilizing the data from the Radford surveys. If through this assessment we determine that an employee's compensation is below the benchmarks, a market adjustment may be recommended. Additionally, we review base salaries and make adjustments as warranted for changes in the scope or breadth of an executive officer's role or responsibilities and any internal inequities identified through the use of our benchmarking review. In establishing base salaries fiscal year 2006, the compensation committee reviewed data from the Radford Biotechnology Survey and the Radford

Biotech Pre-IPO Survey as primary reference points. Additionally, the compensation committee's review of the information provided in the analysis by the compensation consultant contributed to the compensation committee's decision to make certain salary adjustments in 2006.

Using the Radford data as its industry benchmark, the compensation committee initially set the base salary of Pieter Muntendam at \$235,000, the base salary of Stephen Martin at \$200,000 and the base salary of Robert McBurney at \$230,000. In November 2006, our compensation committee reevaluated the base salaries of the named executive officers, based on an assessment of the corporate and individual goals achieved by the officers during the course of 2006 to that date, as well as on data provided by the compensation consultant's analysis, suggesting that certain salaries were significantly below the targeted range.

The compensation committee increased the salary of Pieter Muntendam from \$235,000 to \$275,000 in recognition of his overall performance during 2006 and, in particular, for his successful negotiations with a collaborative investment partner and two important new initiatives. Also in November 2006, our compensation committee promoted Stephen A. Martin from Senior Vice President, Chief Technology Officer, to Executive Vice President, Chief Technology Officer, in recognition of his exceptional performance and success in creating a robust platform, management of the research and development teams, successful initiation and completion of several major partner programs, which assisted in positioning us for continued growth. In recognition of this promotion, the compensation committee approved the increase of Dr. Martin's base salary from \$200,000 to \$225,000.

Additionally, the compensation committee was influenced in its decisions to increase these executives' salaries by the fact that data provided by the compensation consultant who analyzed average salaries of executive officers of comparable companies suggested that both Dr. Muntendam's salary and Dr. Martin's salary were low relative to the market. Specifically, Dr. Muntendam's base salary of \$235,000 was well below the base salary level at the 25th percentile of \$299,820. In an effort to begin to move Dr. Muntendam's base compensation closer to the 50th percentile of the range, the compensation committee approved a 14.5% increase, with 10% as a market adjustment and the remaining 4.5% for an annual merit adjustment associated with 2006 performance. Dr. Martin's salary of \$200,000 was also well below the base salary level at 50th percentile of \$227,767 and, accordingly, the compensation committee increased his salary to \$225,000, thereby bringing it closer to the 50th percentile. The compensation committee determined that Dr. McBurney's salary of \$230,000 was competitively close to the base salary at the 50th percentile of \$234,000, and therefore made no further adjustment.

Annual Bonus

Each of our named executive officers is eligible for annual performance-based bonuses. We provide this bonus opportunity in order to be competitive with our peers and as a means of attracting and retaining highly skilled and experienced executive officers. We believe this potential for additional cash compensation further motivates our executives to achieve annual corporate, departmental and individual goals, which consist of various revenue, cost and operational targets, some of which are non-financial. The maximum target bonus amounts for our named executive officers are determined by the executive's rank, with each level differentiated as follows: maximum target bonus for our Chief Executive Officer is 50% of the then current annual base salary; maximum target bonus for our Chief Financial Officer is 40% of the then current annual base salary and maximum target bonus of our other named executive officers is 30% of the then current base salary.

Our compensation committee determines the specific amount of annual performance-based bonuses to be awarded to our executive officers, including our Chief Executive Officer, based on the achievement of certain financial and non-financial goals, all of which have been predetermined by our Board of Directors. Our compensation committee gives equal weight to the achievement of our financial goals and the achievement of non-financial goals and then makes a subjective determination

of the amount of bonus awards for each executive based on the level of achievement of those goals compared to the expected level of achievement and the level of achievement relative to other executive officers. The compensation committee weighs the achievement of corporate goals at 80% and the achievement of individual goals at 20% in making the evaluation.

Bonuses Paid in 2006

The amounts of bonuses paid in 2006 to each of our named executive officers were determined at the end of November 2006 by the compensation committee after examining our financial results and evaluating the performance of each executive officer against his individual goals in a combined assessment of both 2005 and 2006. The compensation committee also considered the analysis of the market data regarding bonuses awarded that was provided by the compensation consultant. The compensation committee and board of directors reviewed our progress against our corporate performance goals for 2006 and the performance of each individual executive officer with regard to meeting his individual performance goals. In judging the degree to which these goals were achieved, the board and compensation committee made qualitative and quantitative assessments of performance for each goal, which assessments were then expressed as a percentage of target achieved, according to the 80%/20% split described above. Through this analysis, the compensation committee determined that we fell short of our revenue targets, while our executives met the majority of their individual targets and non-financial goals for this period, as discussed above and described in greater detail below.

Based on their contributions to the achievement of these corporate goals and on their respective achievement of their individual goals, the compensation committee determined that bonuses would be paid to Drs. Muntendam, Martin and McBurney. The compensation committee based its determination of these bonuses on their ongoing contributions to our growth and development and the committee's confidence in their ability to further our overall corporate goals through their achievement of specific corporate and individual goals. The compensation committee took into account that these contributions have been, and based on Dr. Muntendam, Dr. Martin and Dr. McBurney's growing expertise in the biomarker discovery marketplace, will continue to be, instrumental in achieving our overall goal of continued growth.

The compensation committee acknowledged that Dr. Muntendam had made tremendous headway in establishing BG Medicine as a premier biomarker discovery company. Dr. Muntendam was pivotal in recruiting seven pharmaceutical partners for the LTBS initiative as well as securing an important strategic partnership with Philips. In 2006, Dr. Muntendam created the HRP initiative, a first of its kind study designed to address critical medical need. Dr. Muntendam received a bonus in the amount of \$34,250 reflecting the compensation committee's determination that he had surpassed his individual targets and non-financial goals for 2006.

The compensation committee acknowledged that Dr. Martin managed the data generation and project completion of two significant partnerships to include AstraZeneca and TB Alliance and noted his leadership in improving project deficiencies by 25% from 2005 to 2006. Dr. Martin was credited for operational excellence within the Research and Development teams and for his ongoing mentorship and exceptional retention rates. Dr. Martin received an aggregate bonus of \$30,625 in recognition of his achievement of these individual targets and non-financial goals for 2006.

The compensation committee acknowledged that Dr. McBurney completed the project work plan and provided scientific oversight to the formation of the LTBS initiative and assumed the position of Principal Investigator for BGM. The compensation committee also recognized his scientific contribution to project summaries for key partnerships and for his scientific counsel to strategic business development activities. Dr. McBurney received a bonus of \$24,150 in recognition of his achievement of these individual targets and non-financial goals for 2006.

Long-Term Incentive Program

We believe that long-term performance will be enhanced through stock and equity awards that reward our executives for maximizing stockholder value over time and that align the interests of our employees and management with those of stockholders. The compensation committee believes that the use of stock and equity awards offers the best approach to achieving our compensation goals because equity ownership ties a significant portion of an executive's compensation to the performance of our company's stock. We have historically elected to use stock options as the primary long-term equity incentive vehicle.

Stock Options

Stock options are awarded based on various factors including the responsibilities of the individual executive officer, his or her past performance, anticipated future contributions, prior option grants (including the vesting schedule of such prior grants) and the executive's total cash compensation. We have used and expect to continue to use stock options as a long-term incentive vehicle because we believe that:

Stock options and the vesting period of stock options attract and retain executives.

Stock options are inherently performance-based. Because all the value received by the recipient of a stock option is based on the growth of the stock price, stock options enhance the executives' incentive to increase our stock price and maximize stockholder value.

Stock options help to provide a balance to the overall executive compensation program as base salary and our annual performance bonus program focus on short-term compensation, while stock options reward executives for increases in stockholder value over the longer term.

For a description of the terms and conditions of our stock option plan, see "Executive Compensation Equity Incentive Plans."

Restricted Stock. During our first year of operations in 2000, we awarded restricted stock rather than stock options to our officers, directors and employees. We continued this practice to a far lesser extent in 2001 and 2002, because we began granting stock options. Accordingly, from 2000 to 2002, we granted 1,307,226 shares of restricted stock to certain officers, directors and employees under our 2001 Stock Plan. The restricted shares granted were subject to vesting over four years, with 25% of the shares vesting on the first anniversary of the grant and the remaining shares vesting at the rate of 6.25% per quarter over the remaining three years thereafter. All currently outstanding shares of restricted stock are fully vested. While we have no current plans to grant restricted stock under our 2007 Stock Plan, we may choose to do so in order to implement the long-term incentive goals set by the compensation committee.

Other Compensation

Consistent with our compensation philosophy, we intend to continue to maintain our current benefits for our executive officers, including medical, dental and life insurance coverage.

Termination Based Change of Control Compensation

Upon termination of employment under certain circumstances, our executive officers are entitled to receive varying types of compensation. Elements of this compensation may include payments based upon a number of months of base salary, acceleration of vesting of equity, and health and other similar benefits. We believe that our termination-based compensation and acceleration of vesting of equity arrangements are in line with severance packages offered to executives of other similar companies, including our package for our Chief Executive Officer, based upon the market information we have

reviewed. We also have granted severance and acceleration of vesting of equity benefits to our executives in the event of a change of control if the executive is terminated within a certain period of time of the change of control. We believe this "double trigger" requirement maximizes stockholder value because it prevents an unintended windfall to management in the event of a friendly or non-hostile change of control. Under this structure, unvested equity awards would continue to incentivize our executives to remain with us after a change of control, and more appropriate than a single trigger acceleration mechanism contingent only upon a change of control. The specifics of each executive officer's arrangements are described in further detail below.

Relationship of Elements of Compensation

Our compensation structure is primarily weighted toward three of the elements discussed: base salary, annual performance bonus, and stock options. We utilize stock options as a substantial component of compensation because we currently have no earnings and expect this to be the case for the foreseeable future. Our mix of cash and non-cash compensation balances our need to limit cash expenditures with the expectations of those we hope to recruit and retain as employees. In the future, we may adjust the mix of cash and non-cash compensation if required by competitive market conditions for attracting and retaining highly skilled personnel.

We manage the expected impact of salary increases and performance bonuses by requiring that the size of such salary increases and bonuses be tied to the attainment of corporate and individual objectives. For example, the size of each employee's bonus is determined not only by individual performance, but also by whether we met our corporate objectives.

We view the award of stock options as a primary long-term retention benefit. We make the award of stock options a significant component of total compensation and also tie the earning of these awards to long-term vesting schedules, generally four years. If an employee leaves our employ before the completion of the vesting period, then that employee would not receive any benefit from the non-vested portion of his award. We believe this feature makes it more attractive to remain as our employee and these arrangements do not require substantial cash payments by us.

Summary Compensation Table

The following table sets forth the compensation paid or accrued during the fiscal year ended December 31, 2006 to (1) our Chief Executive Officer, who also acted in the capacity as principal financial officer during the fiscal year and until May 2007, when we hired Mark Shooman to serve as our Chief Financial Officer, and (2) our two other highest paid executive officers. We refer to these officers as our named executive officers. We did not have any other executive officers during fiscal 2006.

Name and Principal Position	Salary	Bonus ⁽¹⁾	Option Awards ⁽²⁾	Total
Pieter Muntendam, M.D. President and Chief Executive Officer ⁽⁶⁾	\$ 235,000	\$ 34,250	\$ 67,503 ⁽³⁾	\$ 336,753
Stephen A. Martin, Ph.D. EVP, Chief Technology Officer	204,167	30,625	27,313 ⁽⁴⁾	262,105
Robert N. McBurney, Ph.D. SVP, Chief Scientific Officer	230,000	24,150	27,131 ⁽⁵⁾	281,281

(1) Represents bonuses determined based on evaluations of the executives' performances in 2005 and 2006, and paid in 2006.

(2) The value of each of the option awards was computed in accordance with SFAS 123R without consideration of forfeitures. Valuation assumptions are described in the notes to financial statements appearing elsewhere in this prospectus. See our discussion of stock-based compensation under "Management's Discussion and Analysis Critical Accounting Policies and Estimates Stock-Based Compensation." The options generally have a ten-year term and vest with respect to one-fourth of the shares of our common stock on the first anniversary of the grant date and quarterly thereafter until the fourth anniversary of the grant date.

(3) Consists of \$30,875, \$16,625 and \$20,003, representing the compensation expense incurred by us in fiscal year 2006 in connection with option grants to Dr. Muntendam to purchase 303,738 shares of common stock on December 16, 2004, 163,551 shares of common stock on December 8, 2005 and 233,644 shares of common stock on November 28, 2006, calculated in accordance with SFAS 123R.

(4) Consists of \$19,000 and \$8,313 representing the compensation expense incurred by us in fiscal year 2006 in connection with option grants to Dr. Martin to purchase 186,915 shares of common stock on June 24, 2004, and 81,775 shares of common stock on December 8, 2005, calculated in accordance with SFAS 123R.

(5) Consists of \$18,818, \$5,938 and \$2,375 representing the compensation expense incurred by us in fiscal year 2006 in connection with option grants to Dr. McBurney to purchase 186,915 shares of common stock on April 18, 2003, 58,411 shares of common stock on April 15, 2004 and 23,364 shares of common stock on December 8, 2005, calculated in accordance with SFAS 123R.

(6) In addition to his roles as President and Chief Executive Officer, Dr. Muntendam acted in the capacity of principal financial officer during 2006 and until May 2007. Mark D. Shooman began serving as our Chief Financial Officer in May 2007.

Grants of Plan-Based Awards

The following table presents information concerning grants of plan-based awards to Dr. Muntendam during 2006. No plan-based awards were granted to our other named executive officers during 2006.

Name and Principal Position	Grant Date	All Other Option Awards: Number of Securities Underlying Options	Per Share Exercise or Base Price of Option or Stock Awards	Grant Date Fair Value of Stock and Option Awards ⁽¹⁾
Pieter Muntendam, M.D. President and Chief Executive Officer ⁽³⁾	November 28, 2006	233,644 ⁽²⁾	\$ 0.54	\$ 1,662,550

- (1) The value of restricted stock and option awards granted to our named executive officers was computed in accordance with SFAS 123R without consideration of forfeitures. See our discussion of stock-based compensation under "Management's Discussion and Analysis Critical Accounting Policies and Estimates Stock-Based Compensation." Valuation assumptions are described in the notes to financial statements appearing elsewhere in this prospectus.
- (2) One quarter of the option, or 58,411 shares, vests in November 2007, with the balance vesting in increments of 14,603 shares on a quarterly basis over three additional years.
- (3) In addition to his roles as President and Chief Executive Officer, Dr. Muntendam acted in the capacity of principal financial officer during 2006 and until May 2007. Mr. Shoorman began serving as our Chief Financial Officer in May 2007.

Employment Agreements with Our Named Executive Officers

Pieter Muntendam, M.D. We entered into an employment agreement with Dr. Muntendam in December 2004. Dr. Muntendam's annual base salary is currently \$275,000. Pursuant to the employment agreement, Dr. Muntendam has the opportunity to earn an annual performance bonus of up to 50% of his salary, based on achievement of a series of personal and corporate objectives that our board of directors and Dr. Muntendam define annually, and is also eligible to receive annual stock option grants based on our corporate performance. When Dr. Muntendam joined us as our President and, at the time, Chief Operating Officer, he received an option to purchase 303,738 shares of our common stock at an exercise price of \$0.54 per share. One quarter of the option vested in December 2005 and the balance vests quarterly over three additional years.

In December 2005, Dr. Muntendam began serving as our Chief Executive Officer and received an option to purchase 163,551 shares of our common stock at an exercise price of \$0.54 per share. One quarter of the option vested in December 2006 and the balance vests quarterly over three additional years. In November 2006, Dr. Muntendam received an additional option to purchase 233,644 shares of our common stock at an exercise price of \$0.54 per share, one quarter of which vests in November 2007 and the balance vests quarterly over three additional years.

As a condition of employment, Dr. Muntendam has entered into a non-competition and non-solicitation agreement pursuant to which he has agreed not to compete with us for a period of twelve months after the termination of his employment.

Dr. Muntendam is entitled to certain benefits in connection with a termination of his employment or a change in control discussed below under "Potential Payments Upon Termination Due to Change in Control."

Mark D. Shooman. We entered into an employment agreement with Mr. Shooman, our Chief Financial Officer, in May 2007. Mr. Shooman's annual base salary is currently \$225,000. Pursuant to his employment agreement, Mr. Shooman has the opportunity to earn an annual performance bonus of up to 40% of his annual salary, based on the achievement of a series of personal and corporate objectives that our board of directors and Dr. Muntendam define annually, and is also eligible to receive annual stock option grants based on our corporate performance. Upon commencement of his employment with us, Mr. Shooman received a signing bonus of \$10,000 and an option to purchase 186,915 shares of our common stock at an exercise price of \$8.77 per share. One quarter of the option vests in April 2008 and the balance vests monthly over three additional years.

As a condition of employment, Mr. Shooman has entered into a non-competition and non-solicitation agreement pursuant to which he has agreed not to compete with us for a period of twelve months after the termination of his employment. Mr. Shooman's employment agreement does not have a defined term.

Mr. Shooman is entitled to certain benefits in connection with a termination of his employment or a change in control discussed below under "Potential Payments Upon Termination Due to Change in Control."

Stephen A. Martin, Ph.D. Pursuant to an employment agreement dated April 9, 2004 between us and Dr. Martin, we agreed to employ Dr. Martin as Senior Vice President and Chief Technology Officer commencing on May 17, 2004. At that time, Dr. Martin received a signing bonus of \$15,000. Dr. Martin is eligible to receive an annual cash bonus of up to 30% of his base salary based on the achievement of individual and corporate milestones. Dr. Martin began serving as our Executive Vice President, Chief Technology Officer in November 2006. Dr. Martin's annual base salary is currently \$225,000.

As a condition of employment, Dr. Martin has entered into a non-competition and non-solicitation agreement pursuant to which he has agreed not to compete with us for a period of twelve months after the termination of his employment. Dr. Martin's employment agreement does not have a defined term.

Dr. Martin is entitled to certain benefits in connection with a termination of his employment or a change in control discussed below under "Potential Payments Upon Termination Due to Change in Control."

Robert N. McBurney, Ph.D. Pursuant to an employment agreement dated March 2, 2003 between us and Dr. McBurney, we agreed to employ Dr. McBurney as Senior Vice President, Research and Development and Chief Scientific Officer beginning March 10, 2003. Dr. McBurney is eligible to receive an annual cash bonus of up to 30% of his base salary based on the achievement of individual and corporate milestones. Dr. McBurney's annual base salary is currently \$230,000.

As a condition of employment, Dr. McBurney has entered into a non-competition and non-solicitation agreement pursuant to which he has agreed not to compete with us for a period of twelve months after the termination of his employment. Dr. McBurney's employment agreement does not have a defined term.

Dr. McBurney is entitled to certain benefits in connection with a termination of his employment or a change in control discussed below under "Potential Payments Upon Termination Due to Change in Control."

Outstanding Equity Awards at Fiscal Year-End

The following table presents the outstanding equity awards held by each of the named executive officers as of December 31, 2006.

Name and Principal Position	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable ⁽¹⁾	Option Exercise Price	Option Expiration Date
Pieter Muntendam, M.D. ⁽²⁾ President and Chief Executive Officer	40,888 151,869	233,644 122,663 151,869	\$ 0.54 0.54 0.54	November 28, 2016 December 8, 2015 December 16, 2014
Stephen A. Martin, Ph.D. EVP, Chief Technology Officer	20,444 116,822	61,331 70,093	0.54 0.54	December 8, 2015 June 24, 2014
Robert N. McBurney, Ph.D. SVP, Chief Scientific Officer	5,841 43,808 175,233	17,523 14,603 11,682	0.54 0.54 0.54	December 8, 2015 April 15, 2014 April 18, 2013

(1) 25% of the total number of shares subject to option vest at the end of the first year, the remainder vest 6.25% per quarter thereafter.

(2) In addition to his roles as President and Chief Executive Officer, Dr. Muntendam acted in the capacity of principal financial officer for our 2006 fiscal year and until May 2007. Mr. Shooman began serving as our Chief Financial Officer in May 2007. Mr. Shooman was granted options to purchase 186,915 shares of common stock at an exercise price of \$8.77 with an expiration date of April 27, 2015.

Option Exercises and Stock Vested at Fiscal Year End

There were no options exercised by any of the named executive officers during 2006.

Pension Benefits

None of our named executive officers participates in or has account balances in qualified or non-qualified defined benefit plans sponsored by us.

Nonqualified Deferred Compensation

None of our named executive officers participate in or have account balances in non-qualified defined contribution plans or other deferred compensation plans maintained by us. The compensation committee may elect to provide our officers and other employees with non-qualified defined contribution or deferred compensation benefits if the compensation committee determines that doing so is in our best interests.

Severance Benefits and Change of Control Arrangements

We have agreed to provide severance benefits and change of control arrangements to our current executives, as described below.

Pieter Muntendam, M.D. Dr. Muntendam's employment agreement with us will continue for successive one-year terms until either Dr. Muntendam or we provide written notice of termination to the other in accordance with the terms of the agreement. Upon the termination of his employment by us other than for cause, or if we decide not to extend Dr. Muntendam's agreement at the end of any

term, or termination of his employment by him for good reason, Dr. Muntendam has the right to receive (i) a severance payment in an amount equal to twelve months of his base salary then in effect, payable in accordance with our regular payroll practices, and (ii) continuation of benefits for a comparable period as a result of any such termination. Further, the vesting of all options then held by Dr. Muntendam shall accelerate in full. Dr. Muntendam is not entitled to severance payments or accelerated vesting if we terminate him for cause or if he resigns without good reason. Dr. Muntendam is bound by non-disclosure, inventions and non-competition covenants that prohibit him from competing with us during the term of his employment and for one year after termination of employment.

We also have entered into a change of control cash severance agreement with Dr. Muntendam. If Dr. Muntendam is not offered comparable employment with the successor upon a change of control, or he begins employment with the successor, but resigns for good reason or is terminated without cause within twelve months following the change of control, then Dr. Muntendam has the right to receive a severance payment in an amount equal to twelve months of base salary then in effect, one-half of which is payable within thirty days following the triggering event and the balance upon the earlier of twelve months following the triggering event or his death. Dr. Muntendam also has the right to continuation of benefits then in effect for a period of twelve months following the triggering event.

Further, pursuant to the terms of Dr. Muntendam's option agreements, if Dr. Muntendam is terminated without cause upon a change of control, the vesting of all options then held by him shall accelerate in full, and all repurchase rights that we may have as to any of his stock will automatically lapse. We believe that the severance package for our Chief Executive Officer is in line with severance packages offered to chief executive officers of comparable companies as represented by compensation data we have reviewed.

Mark D. Shooman. Pursuant to the terms of Mr. Shooman's employment agreement, should we terminate Mr. Shooman employment without cause, and conditioned upon his execution of a separation agreement which contains, among other things, a general release of claims, Mr. Shooman will receive severance pay equivalent to six months of his annual base salary and six months of health benefit continuation at the time of such termination.

We also have entered into a change of control cash severance agreement with Mr. Shooman. If Mr. Shooman is not offered comparable employment with the successor upon a change of control, or he begins employment with the successor, but resigns for good reason or is terminated without cause within twelve months following the change of control, then Mr. Shooman has the right to receive a severance payment in an amount equal to nine months of base salary then in effect, one-half of which is payable within thirty days following the triggering event and the balance upon the earlier of nine months following the triggering event or his death. Mr. Shooman also has the right to continuation of benefits then in effect for a period of nine months following the triggering event.

Further, pursuant to the terms of Mr. Shooman's option agreement, if Mr. Shooman is terminated without cause upon a change of control, the vesting of options or restricted stock awards then held by him will automatically accelerate in full.

Stephen A. Martin, Ph.D. We have entered into a change of control cash severance agreement with Dr. Martin. If Dr. Martin is not offered comparable employment with the successor upon a change of control, or he begins employment with the successor, but resigns for good reason or is terminated without cause within twelve months following the change of control, then Dr. Martin has the right to receive a severance payment in an amount equal to nine months of base salary then in effect, one-half of which is payable within thirty days following the triggering event and the balance upon the earlier of nine months following the triggering event or his death. Dr. Martin also has the right to continuation of benefits then in effect for a period of nine months following the triggering

event. Further, pursuant to the terms of Dr. Martin's option agreements, the vesting on options or restricted stock awards then held by him will automatically accelerate in full.

Robert N. McBurney, Ph.D. We have entered into a change of control cash severance agreement with Dr. McBurney. If Dr. McBurney is not offered comparable employment with the successor upon a change of control, or he begins employment with the successor, but resigns for good reason or is terminated without cause within twelve months following the change of control, then Dr. McBurney has the right to receive a severance payment in an amount equal to six months of base salary then in effect, one-half of which is payable within thirty days following the triggering event and the balance upon the earlier of six months following the triggering event or his death. Dr. McBurney also has the right to continuation of benefits then in effect for a period of six months following the triggering event.

Further, pursuant to the terms of Dr. McBurney's option agreements, the vesting on options or restricted stock awards then held by him will automatically accelerate by nine months.

Each executive is bound by non-disclosure, inventions transfer, non-solicitation and non-competition covenants that prohibit the executive from competing with us during the term of his or her employment and for twelve months after termination of employment. We believe that the severance packages for our executive officers are consistent with severance packages offered to executive officers of comparable companies as represented by compensation data we have reviewed.

Potential Payments Upon Termination Without Cause

The following table sets forth quantitative estimates of the benefits that would have accrued to each of our named executive officers if his employment were terminated without cause as of December 31, 2006. Amounts below reflect potential payments pursuant to the employment agreements for such named executive officers.

Name and Principal Position	Salary Continuation	Benefit Continuation	Value of Accelerated Option Vesting ⁽¹⁾
Pieter Muntendam, M.D. President and Chief Executive Officer	\$ 137,500	\$ 9,427	\$ 1,284,812
Mark D. Shooman ⁽²⁾ Chief Financial Officer	112,500	9,427	

(1) Calculated based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, less the applicable per share exercise or purchase prices.

(2) Mr. Shooman began serving as our Chief Financial Officer in May 2007.

Potential Payments Upon Termination Due to Change in Control

The following table sets forth quantitative estimates of the benefits that would have accrued to each of our named executive officers if his employment were terminated due to constructive termination upon a change in control as of December 31, 2006, assuming that such termination occurred within the period beginning on the first day of the calendar month immediately preceding the calendar month in which the effective date of a change in control occurs and ending on the last day of the twelfth calendar month following the calendar month in which the effective date of a change in

control occurs. Amounts below reflect potential payments pursuant to the employment agreements for such named executive officers.

Name and Principal Position	Salary Continuation	Benefit Continuation	Value of Accelerated Option Vesting ⁽¹⁾
Pieter Muntendam, MD President and Chief Executive Officer	\$ 275,000	\$ 18,854	\$ 3,310,855
Mark D. Shooman ⁽²⁾ Chief Financial Officer	168,750	14,141	42,990
Steven A. Martin, PhD SVP, Chief Technology Officer	168,750	14,141	1,111,847
Robert N. McBurney Chief Scientific Officer	115,000	9,427	228,547

(1) Calculated based on an assumed initial public offering price of \$9.00, the mid-point of the price range on the cover page of this prospectus, less the applicable per share exercise or purchase prices.

(2) Mr. Shooman began serving as our Chief Financial Officer in May 2007 and the value of his accelerated option vesting is calculated as of September 30, 2007.

Confidential Information and Inventions Agreement

Each of our named executive officers has also entered into a standard form agreement with respect to confidential information and inventions. Among other things, this agreement obligates each named executive officer to refrain from disclosing any of our proprietary information received during the course of employment and to assign to us any inventions conceived or developed during the course of employment.

Compensation of Directors

During 2006, none of our directors received compensation for service on our board of directors or on the committees thereof. In 2003, we granted Dr. Papadopoulos a stock option to purchase 560,747 shares of our common stock at an exercise price of \$0.54 per share for his service on the board of directors. In connection with their initial election to the board of directors in 2007, we granted each of Dr. Harris and Mr. Bains a stock option to purchase 14,018 shares of our common stock at an exercise price of \$8.77 per share. The option granted to Dr. Papadopoulos has an eight-year term and the options granted to Dr. Harris and Mr. Bains have ten-year terms. All such options vest with respect to one-fourth of the shares of our common stock on the first anniversary of the grant date and quarterly thereafter until the fourth anniversary of the grant date. Continued vesting of the options is subject to continued service on the board of directors.

In recent years we have not had a policy in place, nor have we paid any compensation to our non-employee directors for serving on our board of directors other than as set forth above or for reimbursement of reasonable out-of-pocket expenses incurred for attending meetings of our Board of Directors or any committees thereof.

In July 2007, our board of directors adopted the Non-Employee Director Compensation Policy that will become effective following the completion of this offering. The policy is designed to ensure that the compensation aligns the directors' interests with the long-term interests of the stockholders, that the structure of the compensation is simple, transparent and easy for stockholders to understand and

that our directors are fairly compensated. Directors who are also our employees, such as Dr. Muntendam, will not receive additional compensation for their services as directors.

Under the policy, upon initial election or appointment to the board of directors, new non-employee directors receive a non-qualified stock option to purchase 14,018 shares of our common stock at an exercise price equal to the fair market value on the date of grant that vests one year from the date of grant. Each year of a non-employee director's tenure, the director will receive a non-qualified stock option to purchase 7,009 shares of our common stock at an exercise price equal to the fair market value on the date of grant that vests one year from the date of grant. The options become fully vested and exercisable upon a change of control.

In addition, each non-employee director will be paid an annual retainer of \$20,000, or \$40,000 in the case of the chairperson, for their services. For each meeting of our board of directors that a non-employee director attends in person in excess of six meetings in a single calendar year, such non-employee director shall be paid \$1,500. Committee members receive additional annual retainers in accordance with the following:

Committee	Chairman	Member
Audit Committee	\$ 5,000	\$ 3,000
Compensation Committee	5,000	3,000
Nominating and Governance Committee	5,000	3,000

Equity Incentive Plans

2001 Stock Option and Incentive Plan

Our 2001 Stock Plan was adopted initially by our board of directors in June 2001 and approved by our stockholders in March 2002. The 2001 Stock Plan was amended in April 2002, December 2003, March 2004 and June 2007 to increase the number of shares of our common stock and options to purchase shares of our common stock available for grant under the plan.

The purpose of the 2001 Stock Plan is to provide stock options and other equity awards to our employees, officers, directors, consultants and advisors. The 2001 Stock Plan is administered by our board of directors and the Compensation Committee, which has the discretion to delegate to one or more of our executive officers the power to grant stock awards up to a maximum number of shares allocable to any one grantee. Under the 2001 Stock Plan, the board of directors or its delegate may grant incentive stock options, non-qualified stock options, restricted stock awards and other stock-based awards and may set the terms of these awards, including the vesting schedule, exercise price and the duration of the exercise period of options and the terms of repurchase provisions of restricted stock. As of September 30, 2007, there were outstanding options to purchase 3,122,331 shares of our common stock under the 2001 Stock Plan and 543,731 shares of our common stock available for future grant. Our board of directors approved the termination of the 2001 Stock Plan to take effect upon the completion of this offering, after which time no additional options will be granted under the 2001 Stock Plan, but options previously granted under the 2001 Stock Plan will continue to be governed by the terms of the plan.

2007 Employee, Director and Consultant Equity Incentive Plan

Our board of directors and our stockholders have approved the 2007 Employee, Director and Consultant Equity Incentive Plan, or the 2007 Stock Plan, which will become effective upon completion of this offering. The 2007 Stock Plan will expire on September 20, 2017. Under our 2007 Stock Plan, we may grant incentive stock options, nonqualified stock options, restricted and unrestricted stock awards and other stock-based awards. There will be 794,392 shares of our common stock authorized for issuance under the 2007 Stock Plan. In addition, any shares of our common stock that are presently

subject to outstanding options under our 2001 Stock Plan but which are unissued on or after the date that the 2007 Stock Plan is adopted upon the cancellation, surrender or termination of such options, shall be added to the shares of our common stock authorized under the 2007 Stock Plan to be available for future issuance; provided, however, that no more than 3,122,331 shares of our common stock, the number of options outstanding under our 2001 Stock Plan upon stockholder approval of the 2007 Stock Plan, shall be added to the 2007 Stock Plan pursuant to this provision.

In addition, the 2007 Stock Plan contains an "evergreen" provision, which allows for an annual increase in the number of shares of our common stock available for issuance under the plan on the first day of each fiscal year during the period beginning on the first day of fiscal year 2009 and ending on the second day of fiscal year 2017. The annual increase in the number of shares shall be equal to the lowest of:

934,579 shares of our common stock;

5% of the number of shares of our common stock outstanding as of the close of business on the immediately preceding day;
and

an amount determined by our board of directors.

The board of directors has authorized our compensation committee to administer the 2007 Stock Plan. In accordance with the provisions of the plan, the compensation committee will determine the terms of options and other awards, other than awards to directors, executive officers and other members of senior management, which will be determined by the board of directors. The compensation committee or our board of directors will determine:

which employees, directors and consultants shall be granted options and other awards;

the number of shares of our common stock subject to options and other awards;

the exercise price of each option, which generally shall not be less than fair market value on the date of grant;

the schedule upon which options become exercisable;

the termination or cancellation provisions applicable to options;

the terms and conditions of other awards, including conditions for repurchase, termination or cancellation, issue price and repurchase price; and

all other terms and conditions upon which each award may be granted in accordance with our plan.

No participant may receive awards for more than 467,289 shares of our common stock in any fiscal year.

In addition, our board of directors or any committee to which the board of directors delegates authority may, with the consent of the affected plan participants, reprice or otherwise amend outstanding awards consistent with the terms of our plan.

Upon a merger or other reorganization event, our board of directors, or the board of directors of any corporation assuming our obligations, may, in its sole discretion, take any one or more of the following actions pursuant to our plan, as to some or all outstanding awards:

provide that outstanding options shall be assumed or substituted by the successor corporation;

terminate unexercised outstanding options immediately prior to the consummation of such transaction unless exercised by the optionee;

make or provide for a cash payment to the participants equal to the difference between the merger price times the number of shares of our common stock subject to such outstanding options, to the extent then exercisable at prices not in excess of the merger price, and the aggregate exercise price of all such outstanding options, in exchange for the termination of such options;

provide that all or any outstanding options shall become exercisable in full immediately prior to such event; and

provide that outstanding awards shall be assumed or substituted by the successor corporation, become realizable or deliverable, or restrictions applicable to an award will lapse, in whole or in part, prior to or upon the merger or reorganization event.

Pension Plan and Other Benefits

We have a defined contribution retirement plan in which all employees are eligible to participate. Our plan is intended to qualify under Section 401(k) of the Internal Revenue Code so that contributions by employees and by us to our plan and income earned on plan contributions are not taxable to employees until withdrawn or distributed from the plan, and so that contributions, including employee salary deferral contributions, will be deductible by us when made. We do not currently provide matching contributions under this plan but may choose to do so in the future. We also contribute to medical, disability and other standard insurance for our employees. Our non-employee directors do not receive pension, retirement or similar benefits from us.

PRINCIPAL STOCKHOLDERS

The following table presents information about the beneficial ownership of our common stock as of September 30, 2007, and as adjusted to reflect the shares offered by this prospectus, by:

each existing stockholder we know to beneficially own 5% or more of our common stock, which we call our principal stockholders;

each of our directors;

each of our named executive officers; and

all of our current directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting or investment power with respect to the securities. Shares of common stock that may be acquired by an individual or group within 60 days following September 30, 2007, pursuant to the exercise of options or warrants, are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table.

The percentage of shares owned before the offering is based on 14,483,942 shares of our common stock outstanding as of September 30, 2007, assuming the automatic conversion of all shares of our convertible preferred stock outstanding at September 30, 2007 into an aggregate of 9,723,069 shares of our common stock effective immediately prior to the completion of this offering. The percentage of shares owned after the offering is based on 19,267,453 shares of our common stock to be outstanding after the offering, including 4,500,000 shares of our common stock being offered by this prospectus, 46,261 shares of our common stock issued in November 2007 upon the net exercise of warrants, 15,030 shares of our common stock to be issued upon the automatic net exercise of a warrant immediately prior to the completion of this offering and 222,220 shares of our common stock to be issued upon the automatic conversion of convertible notes immediately prior to the completion of this offering, based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus.

Certain of our existing stockholders and directors, consisting of entities affiliated with Flagship Ventures, or Flagship, with which our director Noubar Afeyan, is affiliated, Gilde Europe Food & Agribusiness Fund B.V., or Gilde, with which our director Pieter van der Meer is affiliated, and Stelios Papadopoulos, have indicated an interest in purchasing shares of our common stock in this offering at the initial public offering price in an amount of up to an aggregate of \$8.0 million. Based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, this would consist of an aggregate of up to 888,888 shares of the 4,500,000 shares being offered (excluding the shares covered by the underwriters' overallotment option). Of the aggregate of \$8.0 million, Flagship has indicated an interest to purchase up to \$5.0 million, Gilde has indicated an interest to purchase up to \$2.0 million and Dr. Papadopoulos has indicated an interest to purchase up to \$1.0 million. Because these indications of interest are not binding agreements or commitments to purchase, these existing stockholders and directors may elect not to purchase any shares in this offering.

On December 27, 2007 we entered into an agreement to issue \$2.0 million aggregate principal amount of convertible notes to entities affiliated with Flagship and to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of our existing lenders. Interest on the notes accrues at the rate of 10% per year. Of the aggregate \$2.0 million, Flagship will purchase \$1.4 million and Gilde will purchase \$600,000 of these convertible notes. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically

convert upon the closing of this offering into that number of shares of our common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, the principal amount of the notes will convert into approximately 222,220 shares of our common stock.

Assuming such purchases and the conversion of the notes at an assumed initial public offering price of \$9.00 per share and based on 19,267,453 shares of common stock outstanding after this offering, Flagship would beneficially own 47.2%, Gilde would beneficially own 14.6%, and Dr. Papadopoulos would beneficially own 6.8%, of our common stock outstanding after this offering. Assuming such purchases and based on 19,267,453 shares of common stock outstanding after this offering, our executive officers and directors as a group would beneficially own 66.5% of our outstanding common stock after this offering.

Assuming a \$1.00 decrease in the assumed initial public offering price of \$9.00 per share, the mid-point of the range on the cover page of the prospectus, to \$8.00 per share and based on 19,267,453 shares of common stock outstanding after this offering, our executive officers and directors as a group would beneficially own 67.1% of our outstanding common stock after this offering. If the actual initial public offering price is less than \$8.00 per share, the preceding beneficial ownership percentages will be higher. Assuming a \$1.00 increase in the assumed initial public offering price of \$9.00 per share, the mid-point of the range on the cover page of the prospectus, to \$10.00 per share and based on 19,267,453 shares of common stock outstanding after this offering, our executive officers and directors as a group would beneficially own 66.0% of our outstanding common stock after this offering. If the actual initial public offering price is greater than \$10.00 per share, the preceding beneficial ownership percentages will be lower.

Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them, based on information provided to us by such stockholders.

Beneficial Owner ⁽¹⁾	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
Principal Stockholders			
Entities affiliated with Flagship Ventures ⁽²⁾	8,665,608	57.5%	44.4%
Gilde Europe Food & Agribusiness Fund B.V. ⁽³⁾	2,584,958	17.4%	13.5%
Koninklijke Philips Electronics N.V. ⁽⁴⁾	1,156,657	8.0%	6.0%
Directors			
Noubar Afeyan, Ph.D. ⁽⁵⁾	8,665,608	57.5%	44.4%
Harrison M. Bains ⁽⁶⁾			
Joseph Davie, M.D., Ph.D.	46,728	*	*
Timothy Harris, Ph.D. ⁽⁷⁾			
Stelios Papadopoulos, Ph.D. ⁽⁸⁾	1,255,180	8.2%	6.3%
Pieter van der Meer, M.Sc. ⁽⁹⁾	2,584,958	17.4%	13.5%
Daniel Wang, Ph.D.	23,364	*	*
Named Executive Officers			
Pieter Muntendam, M.D. ⁽¹⁰⁾	359,591	2.4%	1.8%
Mark D. Shooman ⁽¹¹⁾			
Stephen A. Martin, Ph.D. ⁽¹²⁾	199,327	1.4%	1.0%
Robert N. McBurney, Ph.D. ⁽¹³⁾	251,897	1.7%	1.3%
Directors and Executive Officers as a group⁽¹⁴⁾	13,386,653	78.6%	62.4%

*
Less than 1%

(1) Except as set forth below, the address of all stockholders is c/o BG Medicine, Inc., 610 Lincoln Street North, Waltham, Massachusetts 02451.

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- (2) Consists of 3,383,177 shares held by NewcoGen Group LLC, 171,463 shares and warrants to purchase 31,867 shares held by AGTC Advisors Fund, L.P.; 2,836,667 shares and warrants to purchase 527,243 shares held by Applied Genomic Technology Capital Fund, L. P.; 618,391 shares and warrants to purchase 20,035 shares held by NewcoGen Equity Investors LLC; 372,918 shares and warrants to purchase 3,923 shares held by NewcoGen-Elan LLC; 89,774 shares and warrants to purchase 832 shares held by NewcoGen-Long Reign Holding LLC; 373,713 shares and warrants to purchase 4,161 shares held by NewcoGen-PE LLC; 7,054 shares held by OneLiberty Advisors Fund 2000 L.P.; 134,043 shares held by OneLiberty Ventures 2000 L.P.; and 89,575 shares and warrants to purchase 772 shares held by ST NewcoGen LLC. Percentage of shares beneficially owned after the offering includes 146,688 shares of common stock issuable to Applied Genomic Technology Capital Fund, L.P. and 8,866 shares of common stock issuable to AGTC Advisors Fund, L.P. immediately prior to the closing of the offering upon the automatic conversion of the convertible notes issued to Flagship, as described above, assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus. The percentage of shares beneficially owned after the offering does not include any shares which may be purchased in the offering pursuant to the non-binding indications of interest described above. Noubar B. Afeyan, Ph.D., one of our Directors, is managing partner of Flagship Ventures and may be deemed to share voting and investment power with respect to all shares held by Flagship Ventures. Dr. Afeyan disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any. The address for all of the Flagship entities is One Memorial Drive, 7th Floor, Cambridge, Massachusetts 02140.
- (3) Consists of 2,201,784 shares and warrants to purchase 383,174 shares. Percentage of shares beneficially owned after the offering includes 66,666 shares of common stock issuable immediately prior to the closing of the offering upon the automatic conversion of the principal amount of the convertible note issued to Gilde Europe Food & Agribusiness Fund B.V., as described above, assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus. The percentage of shares beneficially owned after the offering does not include any shares which may be purchased in the offering pursuant to the non-binding indications of interest described above. The manager of the stockholder is Gilde Agribusiness Management B.V., which is indirectly owned by three managing partners, Pieter van der Meer, Edwin de Graaf and Marc Olivier Perret, through a holding entity, Gilde Healthcare Holding B.V. Gilde Healthcare Holding B.V. is owned in equal thirds by the three managing partners. Gilde Europe Food & Agribusiness Partners II C.V. has a 20% carried interest in the stockholder. Pieter van der Meer, Edwin de Graaf and Marc Olivier Perret together have a controlling stake Gilde Europe Food & Agribusiness Partners II C.V. Accordingly, Pieter van der Meer, Edwin de Graaf and Marc Olivier Perret may be deemed to share voting and investment power with respect to the shares. The stockholder's address is Newtonlaan 91, PO Box 85067, 3508 Utrecht, AB, the Netherlands.
- (4) The stockholder's address is Breitner Center HBT-16, P.O. Box 77900, Amstelplein 2, 1070 MX Amsterdam, the Netherlands.
- (5) Reflects securities beneficially owned by entities affiliated with Flagship, for which Dr. Afeyan is the Managing Partner and Chief Executive Officer and is entitled to vote the shares. Dr. Afeyan disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein, if any.
- (6) On June 8, 2007, Mr. Bains was granted an option to purchase 14,018 shares at a price of \$8.77 per share, none of which are exercisable within 60 days following September 30, 2007.
- (7) On April 27, 2007, Dr. Harris was granted an option to purchase 14,018 shares at a price of \$8.77 per share, none of which are exercisable within 60 days following September 30, 2007.
- (8) Consists of 482,664 shares, options to purchase 560,747 shares and warrants to purchase 211,769 shares. Of these securities, 75,670 shares and warrants to purchase 3,056 shares were issued within the past 12 months at a price of \$3.21 and \$0.02 per share, respectively. The percentage of shares beneficially owned after the offering does not include any shares which may be purchased in the offering pursuant to the non-binding indications of interest described above. Dr. Papadopoulos is also one of our principal stockholders.
- (9) Reflects securities beneficially owned by entities affiliated with Gilde Healthcare Partners, for which Mr. van der Meer is the General Manager and is entitled to vote the shares. Mr. van der Meer disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein, if any.
- (10)

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Consists of 16,135 shares, options to purchase 338,784 shares and warrants to purchase 4,672 shares.

- (11) On April 27, 2007, Mr. Shooman was granted an option to purchase 186,915 shares at a price of \$8.77 per share, none of which are exercisable within 60 days following September 30, 2007.
- (12) Consists of options to purchase 199,327 shares.
- (13) Consists of options to purchase 251,897 shares.
- (14) See footnotes 5 through 13.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Except as disclosed below, the members of our board of directors, executive officers and principal stockholders have had no interest in any transactions to which we were a party since January 1, 2004 or which were entered into by us prior thereto and under which we or the other parties still have ongoing obligations.

Sales of Securities

Convertible Notes and Warrants

During the period October 2004 to March 2005, we issued to Flagship Ventures and its affiliates, Gilde Europe Food & Agribusiness Fund B.V. and Stelios Papadopoulos, three of our principal stockholders, an aggregate principal amount of \$5,500,000 in convertible promissory notes. In connection with the issuance of these notes, we issued warrants to purchase 856,695 shares of our common stock at an exercise price of \$0.02 per share that expire ten years from the issue date. In August 2005, the holders of these notes converted them into an aggregate of 3,919,358 shares of our Series A preferred stock at a price of \$1.50 per share.

During the period September 2005 to July 2006, we issued to Flagship Ventures and its affiliates, Gilde Europe Food & Agribusiness Fund B.V., Stelios Papadopoulos and Pieter Muntendam, our President and Chief Executive Officer, an aggregate principal amount of \$3,550,000 in convertible promissory notes. In connection with the issuance of these notes, we issued warrants to purchase 331,753 shares of our common stock at an exercise price of \$0.02 per share that expire ten years from the issue date. In July 2006, the holders of these notes converted them into an aggregate of 2,509,866 shares of our Series A preferred stock at a price of \$1.50 per share.

Upon the closing of this offering, the shares of Series A preferred stock issued upon conversion of these notes will be converted into 3,004,305 shares of our common stock. The warrants will remain outstanding. See "Description of Capital Stock Warrants." Under the terms of the agreements among our stockholders described below, Flagship and Gilde Europe Food & Agribusiness Fund B.V. each have the right to designate one member to our board of directors. Noubar Afeyan, Ph.D., the managing partner of Flagship Ventures, is the current member of our board of directors designated by Flagship. Pieter van der Meer, General Manager of Gilde Healthcare Partners, is the current member of our board of directors designated by Gilde Europe Food & Agribusiness Fund B.V. The rights of Flagship and Gilde Europe Food & Agribusiness Fund B.V. to designate these directors will terminate immediately prior to completion of this offering.

On December 27, 2007 we entered into an agreement to issue \$2.0 million aggregate principal amount in convertible notes to entities affiliated with Flagship Ventures, with which our director, Noubar Afeyan, is affiliated, and to Gilde Europe Food & Agribusiness Fund B.V., with which our director, Pieter van der Meer is affiliated. Of the total amount, \$1.4 million will be issued to Flagship and \$600,000 will be issued to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of our existing lenders. Interest on the notes accrues at the rate of 10% per year. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically convert upon the closing of this offering into that number of shares of our common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, the principal amount of the notes will convert into approximately 222,220 shares of our common stock. The convertible notes were issued in a private placement in accordance with Section 4(2) of the Securities Act of 1933, as amended, and the shares of common stock issued upon the automatic conversion of the notes will be restricted securities. The holders of these notes will be entitled to the

registration rights provided in the Third Amended and Restated Investor Rights Agreement, as amended, with regard to the shares of common stock issued upon the automatic conversion of the notes.

Series A-1 Preferred Stock

In July 2006, we issued to Koninklijke Philips Electronics N.V., one of our principal stockholders, 2,475,247 shares of our Series A-1 preferred stock at a price of \$2.02 per share for aggregate gross proceeds of approximately \$5 million. Upon the closing of this offering, these shares will be converted into 1,156,657 shares of our common stock.

Agreements With Stockholders

In connection with these financings, we entered into a Stockholders' Voting and Co-Sale Agreement and an Investor Rights Agreement, each as most recently amended on May 1, 2007, with Flagship Ventures and its affiliates, Gilde Europe Food & Agribusiness Fund B.V., Stelios Papadopoulos, Koninklijke Philips Electronics N.V. and certain of our other stockholders. These agreements will terminate immediately prior to completion of the offering, other than the portions of the Investor Rights Agreement relating to registration rights, which will continue in effect following completion of the offering and entitle the holders of such rights to have us register their shares of our common stock for sale in the United States. See "Description of Capital Stock Registration Rights of Existing Stockholders."

On September 30, 2007, we entered into an agreement with our stockholders affiliated with Flagship Ventures and with our stockholders Gilde Europe Food & Agribusiness Fund, B.V. and Stelios Papadopoulos. Pursuant to this agreement, these stockholders agreed to provide us with an aggregate of up to \$3 million to be used for our working capital needs through March 31, 2008. Any funds provided to us under this agreement will be evidenced by a series of promissory notes issued to these stockholders in the principal amounts requested by us, and will be due on June 30, 2008 and, if not repaid on that date, upon demand. Any such notes will be issued on current market terms. We plan to use a portion of the net proceeds from this offering to repay any amounts loaned by our stockholders under this agreement and the corresponding promissory notes.

We have entered into a consulting contract with Jan van der Greef, Ph.D., a founder and stockholder, to provide consulting services to us through March 31, 2008.

Collaboration Agreements

In July 2006, we entered into a strategic partnership agreement with Philips Electronics Nederland B.V., an affiliate of Koninklijke Philips Electronics N.V., one of our principal stockholders. See "Business Our Collaborations." In December 2006, Philips Medical Systems Nederland B.V., an affiliate of Koninklijke Philips Electronics N.V., one of our principal stockholders, joined the HRP initiative by entering into a participation agreement with us. See "Business Our Initiatives."

Director and Executive Agreements

Please see "Executive Compensation" for additional information regarding compensation of our executive officers and directors.

We have entered into an employment agreement with Dr. Muntendam, our President and Chief Executive Officer, and into other agreements with our executive officers. For information regarding these agreements, please refer to the section entitled "Executive Compensation Employment Agreements with Our Named Executive Officers."

We have entered into indemnification agreements with our directors and executive officers. See "Management Limitation of Directors' and Officers' Liability and Indemnification."

Participation in Initial Public Offering

Certain of our existing stockholders and directors, consisting of entities affiliated with Flagship Ventures, or Flagship, with which our director Noubar Afeyan, is affiliated, Gilde Europe Food & Agribusiness Fund B.V., or Gilde, with which our director Pieter van der Meer is affiliated, and Stelios Papadopoulos, have indicated an interest in purchasing shares of our common stock in this offering at the initial public offering price in an amount up to an aggregate of \$8.0 million. Based on an assumed initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, this would consist of an aggregate of up to 888,888 shares of the 4,500,000 shares being offered (excluding the shares covered by the underwriters' overallocation option). Because these indications of interest are not binding agreements or commitments to purchase, these existing stockholders and directors may elect not to purchase any shares in this offering.

Assuming such purchases and the issuance of 222,220 shares of our common stock upon the automatic conversion of \$2.0 million principal amount of convertible notes upon the closing of this offering described above, each at an assumed initial public offering price of \$9.00 per share, and based on 19,267,453 shares of common stock outstanding after this offering, Flagship would beneficially own 47.2%, Gilde would beneficially own 14.6%, and Dr. Papadopoulos would beneficially own 6.8%, of our common stock outstanding after this offering. If the actual initial public offering price is less than \$9.00 per share, the preceding beneficial ownership percentages will be higher.

Policy for Approval of Related Person Transactions

Pursuant to the written charter of our audit committee, the audit committee is responsible for reviewing and approving, prior to our entry into any such transaction, all transactions in which we are a participant and in which any parties related to us, including our executive officers, our directors, beneficial owners of more than 5% of our securities, immediate family members of the foregoing persons and any other persons whom our board of directors determines may be considered related parties, has or will have a direct or indirect material interest.

In reviewing and approving such transactions, the audit committee shall obtain, or shall direct our management to obtain on its behalf, all information that the committee believes to be relevant and important to a review of the transaction prior to its approval. Following receipt of the necessary information, a discussion shall be held of the relevant factors if deemed to be necessary by the committee prior to approval. If a discussion is not deemed to be necessary, approval may be given by written consent of the committee. This approval authority may also be delegated to the chairman of the audit committee in some circumstances. No related party transaction shall be entered into prior to the completion of these procedures.

The audit committee or its chairman, as the case may be, shall approve only those related party transactions that are determined to be in, or not inconsistent with, the best interests of us and our stockholders, taking into account all available facts and circumstances as the committee or the chairman determines in good faith to be necessary. These facts and circumstances will typically include, but not be limited to, the benefits of the transaction to us; the impact on a director's independence in the event the related party is a director, an immediate family member of a director or an entity in which a director is a partner, stockholder or executive officer; the availability of other sources for comparable products or services; the terms of the transaction; and the terms of comparable transactions that would be available to unrelated third parties or to employees generally. No member of the audit committee shall participate in any review, consideration or approval of any related party transaction with respect to which the member or any of his or her immediate family members is the related party.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our certificate of incorporation and bylaws are summaries and are qualified by reference to the certificate of incorporation and the bylaws that will become effective upon closing of this offering. Copies of these documents have been filed with the Securities and Exchange Commission as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of the common stock and preferred stock reflect changes to our capital structure that will occur upon the closing of this offering.

Pursuant to our certificate of incorporation to be filed upon completion of this offering, we will be authorized to issue 90,000,000 shares of common stock, \$0.001 par value per share, and 5,000,000 shares of preferred stock, \$0.001 par value per share, none of which will be designated or issued. Our board of directors may establish the rights and preferences of the preferred stock from time to time.

Upon completion of this offering, all of our shares of convertible preferred stock will convert into an aggregate of 9,723,069 shares of our common stock. Accordingly, no shares of our preferred stock will be outstanding immediately following completion of this offering. Assuming such conversion and the automatic net exercise of certain warrants and the automatic conversion of \$2.0 million principal amount of convertible notes, as described below under "Warrants" and "Convertible Notes," as of September 30, 2007, we would have had 14,767,453 shares of our common stock outstanding held of record by 58 stockholders.

Common Stock

Holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Preferred Stock

Preferred stock, if issued, would have priority over common stock with respect to dividends and other distributions, including the distribution of assets upon liquidation. Our board of directors has the authority, without further stockholder authorization, to issue from time to time up to 5,000,000 shares of preferred stock in one or more series and to fix the terms, limitations, voting rights, relative rights and preferences and variations of each series. Although we have no present plans to issue any other shares of preferred stock, the issuance of shares of preferred stock, or the issuance of rights to purchase such shares, could decrease the amount of earnings and assets available for distribution to the holders of common stock, could adversely affect the rights and powers, including voting rights, of the common stock, and could have the effect of delaying, deterring or preventing a change of control of us or an unsolicited acquisition proposal.

Warrants

As of September 30, 2007, we had warrants outstanding for the number of shares of our common stock, at the exercise prices and expiration dates set forth below. Warrants entitle the holder to purchase shares of our common stock at the specified exercise price at any time prior to the expiration date. All of these warrants have net exercise provisions under which the holder may, in lieu of payment

of the exercise price in cash, surrender the warrant and receive a net amount of shares of our common stock based on the fair market value of the underlying shares of our common stock, at the time of exercise of the warrant, after deduction of the aggregate exercise price.

Number of Shares	Weighted Average Exercise Price	Expiration Date
40,887 ⁽¹⁾	3.21	November 4, 2007
26,363 ⁽²⁾	3.21	September 28, 2009
24,910 ⁽¹⁾	3.21	October 28, 2009
23,364 ⁽³⁾	3.21	April 30, 2012
856,695	0.02	July 28, 2015
46,726	0.02	September 8, 2015
46,726	0.02	September 28, 2015
46,726	0.02	November 14, 2015
46,726	0.02	December 15, 2015
98,126	0.02	March 10, 2016
46,726	0.02	July 10, 2016
3,115 ⁽²⁾	3.21	December 28, 2016
3,157 ⁽²⁾	3.21	March 23, 2017
1,873 ⁽²⁾	3.21	June 22, 2017
1,423 ⁽²⁾	3.21	September 28, 2017
Total: 1,313,543	\$ 0.32	

- (1) These warrants were exercised for 46,261 shares of our common stock in November 2007 pursuant to net exercise provisions contained in the warrants.
- (2) These warrants contain price-based anti-dilution provisions providing for adjustments to the exercise price upon the occurrence of specified events, excluding shares of our common stock issuable upon exercise of options, warrants, conversion of convertible securities, stock splits or other distributions on our securities.
- (3) This warrant will be automatically exercised for approximately 15,030 shares of our common stock pursuant to net exercise provisions contained in the warrant immediately prior to the completion of this offering based on an assumed initial offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus.

On November 9, 2007, we issued to Silicon Valley Bank a warrant to purchase 25,608 shares of our common stock at an exercise price of \$7.81 per share.

Convertible Notes

On December 27, 2007 we entered into an agreement to issue \$2.0 million aggregate principal amount in convertible notes to entities affiliated with Flagship Ventures, with which our director, Noubar Afeyan, is affiliated, and to Gilde Europe Food & Agribusiness Fund B.V., with which our director, Pieter van der Meer is affiliated. Of the total amount, \$1.4 million will be issued to Flagship and \$600,000 will be issued to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of our existing lenders. Interest on the notes accrues at the rate of 10% per year. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically convert upon the closing of this offering into that number of shares of our common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus,

the principal amount of the notes will convert into approximately 222,220 shares of our common stock. The convertible notes were issued in a private placement in accordance with Section 4(2) of the Securities Act of 1933, as amended, and the shares of common stock issued upon the automatic conversion of the notes will be restricted securities. The holders of these notes will be entitled to the registration rights provided in the Third Amended and Restated Investor Rights Agreement, as amended, with regard to the shares of common stock issued upon the automatic conversion of the notes.

Registration Rights of Existing Stockholders

The holders, or their transferees, of an aggregate of 14,516,917 shares of our common stock, which includes 9,723,069 shares of common stock issuable upon conversion of all of our outstanding preferred stock, 3,383,177 shares of common stock held by our preferred stockholders, 1,188,451 shares of common stock issuable upon the exercise of warrants held by our preferred stockholders and 222,220 shares of our common stock issuable upon conversion of our convertible notes, are entitled to certain registration rights with respect to these securities as set forth in the Third Amended and Restated Investor Rights Agreement, dated as of May 1, 2007, between us and the holders of these securities, which would require us to register their shares of our common stock for sale under the Securities Act. These registration rights are subject to certain conditions and limitations, including the right of the underwriters of an offering to limit the number of shares of our common stock included in any such registration under certain circumstances. We are generally required to pay all expenses incurred in connection with registrations effected in connection with the following rights, excluding underwriting discounts and commissions. All registration rights described below shall terminate five years after the closing of this offering, or earlier, if the shares of common stock are eligible to be sold without regard to volume limitations under Rule 144(k) under the Securities Act.

Demand Rights. Any holder or holders who collectively hold registrable securities representing at least 40% of the registrable securities then outstanding shall have the right, exercisable by written notice, to have us prepare and file a registration statement under the Securities Act covering the registrable securities that are the subject of such request; provided, that we are not obligated to prepare and file a registration statement (A) within the first six months after the date of effectiveness of the registration statement of which this prospectus forms a part unless the registrable securities that are the subject of such request have an expected aggregate offering price to the public of at least \$3,000,000, or (B) if neither Form S-3 nor another short form registration statement is available to us, unless the registrable securities that are the subject of such request have an expected aggregate offering price to the public of at least \$1,000,000. Subject to the foregoing, the holders shall be permitted one demand registration. In addition under certain circumstances, the underwriters, if any, may limit the number of shares of our common stock included in any such registration, and we may postpone or suspend the filing or effectiveness of such registration.

Piggyback Rights. If at any time we propose to register our common stock under the Securities Act, other than in a registration statement relating solely to sales of securities to participants in a dividend reinvestment plan, or Form S-4 or S-8 or any successor form or in connection with an acquisition or exchange offer or an offering of securities solely to our existing stockholders or employees, we (i) will give prompt written notice to all holders of registrable securities of its intention to effect such a registration and (ii) will include in such registration all registrable securities which are permitted under applicable securities laws to be included in the form of registration statement we select and with respect to which we have received written requests for inclusion therein within 30 days after the receipt of our notice; provided, however, that we are not obligated to include registrable securities of a holder who is eligible for resale into the public market without regard to volume limitations under Rule 144(k) of the Securities Act. We shall have the right to postpone or withdraw any such registration without obligation to any stockholder. In addition, under certain circumstances, the underwriters, if any, may limit the number of shares of our common stock included in any such registration. Silicon Valley Bank is also entitled to these piggyback rights with regard to the 25,608 shares underlying the warrants we have issued and any additional warrants we may issue to it in connection with our bridge loan entered into on November 9, 2007.

Anti-Takeover Provisions of Delaware Law, Our Restated Certificate of Incorporation and Our Restated Bylaws

The provisions of Delaware law, our restated certificate of incorporation to be filed upon completion of this offering and our restated bylaws to be effective upon completion of this offering discussed below could discourage or make it more difficult to accomplish a proxy contest or other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or in our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by the board of directors and to discourage certain types of transactions that may involve an actual or threatened change of our control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. Such provisions also may have the effect of preventing changes in our management.

Delaware Statutory Business Combinations Provision. We are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporations Law. Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. For purposes of Section 203, a "business combination" is defined broadly to include a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and, subject to certain exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns, or within three years prior, did own, 15% or more of the corporation's voting stock.

Classified board of directors; Removal of Directors for Cause. Our restated certificate of incorporation to be filed upon completion of this offering and restated bylaws to be effective upon completion of this offering provide that upon completion of this offering, our board of directors will be divided into three classes, with the term of office of the first class to expire at the first annual meeting of stockholders following the initial classification of directors, the term of office of the second class to expire at the second annual meeting of stockholders following the initial classification of directors, and the term of office of the third class to expire at the third annual meeting of stockholders following the initial classification of directors. At each annual meeting of stockholders, directors elected to succeed those directors whose terms expire will be elected for a three-year term of office. All directors elected to our classified board of directors will serve until the election and qualification of their respective successors or their earlier resignation or removal. The board of directors is authorized to create new directorships and to fill such positions so created and is permitted to specify the class to which any such new position is assigned. The person filling such position would serve for the term applicable to that class. The board of directors, or its remaining members, even if less than a quorum, is also empowered to fill vacancies on the board of directors occurring for any reason for the remainder of the term of the class of directors in which the vacancy occurred. Members of the Board of Directors may only be removed for cause and only by the affirmative vote of 80% of our outstanding voting stock. These provisions are likely to increase the time required for stockholders to change the composition of the board of directors. For example, at least two annual meetings will be necessary for stockholders to effect a change in a majority of the members of the board of directors.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors. Our restated bylaws provide that, for nominations to the board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Secretary. For an annual meeting, a stockholder's

notice generally must be delivered not less than 45 days nor more than 75 days prior to the anniversary of the mailing date of the proxy statement for the previous year's annual meeting. For a special meeting, the notice must generally be delivered not earlier than the 90th day prior to the meeting and not later than the later of (1) the 60th day prior to the meeting or (2) the 10th day following the day on which public announcement of the meeting is first made. Detailed requirements as to the form of the notice and information required in the notice are specified in the restated bylaws. If it is determined that business was not properly brought before a meeting in accordance with our bylaw provisions, such business will not be conducted at the meeting.

Special Meetings of Stockholders. Special meetings of the stockholders may be called only by our board of directors pursuant to a resolution adopted by a majority of the total number of directors.

No Stockholder Action by Written Consent. Our restated certificate of incorporation and restated bylaws do not permit our stockholders to act by written consent. As a result, any action to be effected by our stockholders must be effected at a duly called annual or special meeting of the stockholders.

Super-Majority Stockholder Vote Required for Certain Actions. The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless the corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our restated certificate of incorporation requires the affirmative vote of the holders of at least 75% of our outstanding voting stock to amend or repeal any of the provisions discussed in this section of this prospectus entitled "Anti-Takeover Provisions" or to reduce the number of authorized shares of common stock or preferred stock. This 75% stockholder vote would be in addition to any separate class vote that might in the future be required pursuant to the terms of any preferred stock that might then be outstanding. In addition, an 75% vote is also required for any amendment to, or repeal of, our restated bylaws by the stockholders. Our restated bylaws may be amended or repealed by a simple majority vote of the board of directors.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A., 250 Royall Street, Canton, Massachusetts 02021, (781) 575-2000.

Stock Exchange

We have applied for the listing of our common stock on the NASDAQ Global Market under the symbol "BGMD."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock and a liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of substantial amounts of common stock, including shares issued upon exercise of outstanding options and warrants or in the public market after this offering, or the anticipation of those sales, could adversely affect market prices prevailing from time to time. Furthermore, because only a limited number of shares will be available for sale shortly after this offering due to existing contractual and legal restrictions on resale as described below, there may be sales of substantial amounts of our common stock in the public market after the restrictions lapse. This may adversely affect the prevailing market price and our ability to raise equity capital in the future.

Upon completion of this offering, we will have 19,267,453 shares of common stock outstanding (19,942,453 shares if the overallotment option is exercised in full), assuming no exercise of any outstanding warrants or options as of September 30, 2007, other than the exercise of warrants for 46,261 shares of our common stock in November 2007 and a warrant for 15,030 shares of common stock that will be exercised automatically immediately prior to the completion of this offering, and assuming the automatic conversion of our convertible notes into 222,220 shares of common stock immediately prior to the completion of this offering.

Of the shares to be outstanding immediately after the closing of this offering, the 4,500,000 shares to be sold in this offering will be freely transferable without restriction or registration under the Securities Act, except for any shares purchased by one of our existing "affiliates," as that term is defined in Rule 144 under the Securities Act. The remaining 14,767,453 shares of common stock are "restricted securities" as defined in Rule 144. Substantially all of these restricted shares are subject to the contractual lock-up restrictions described below.

After the 180-day lock-up period, these restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration under Rule 144 or 701 under the Securities Act, which exemptions are summarized below.

Rule 144

In general, under Rule 144 as amended in November 2007 and as will be in effect after the 180-day lock-up period, beginning 90 days after the date of this prospectus, a person, or persons whose shares are aggregated, other than any affiliate, who owns shares that were purchased from us or any affiliate at least six months previously, will be entitled to sell such shares as long as current public information about us is available. In addition, our affiliates who own shares that were purchased from us or any affiliate at least six months previously will be entitled to sell within any three-month period a number of shares that does not exceed the greater of 1% of our then-outstanding shares of common stock, which will equal approximately 192,675 shares immediately after completion of the offering, or the average weekly trading volume of our common stock on the NASDAQ Global Market during the four calendar weeks preceding the date of filing of a notice on Form 144 with respect to the sale, or, if no such notice is required, the date of the receipt of the order to execute the sale. Sales under Rule 144 by our affiliates also will be subject to manner of sale provisions, notice requirements in specified circumstances, and the availability of current public information about us. Upon expiration of the 180-day lock-up period described below, approximately 11,081,893 shares of our common stock will be eligible for sale under Rule 144, excluding shares eligible for resale under Rule 144(k), as described below. We cannot estimate the number of shares of common stock that our existing stockholders will elect to sell under Rule 144.

Rule 144(k)

Subject to the lock-up agreements described below, shares of our common stock eligible for sale under Rule 144(k) may be sold immediately upon the closing of this offering. In general, under the existing Rule 144(k), a person may sell shares of common stock acquired from us immediately upon closing of this offering, without regard to manner of sale, the availability of public information about us or volume limitations, if the person is not our affiliate and has not been our affiliate at any time during the three months preceding such a sale, and the person has beneficially owned the shares proposed to be sold for at least two years, including the holding period of any prior owner other than our affiliates. Under the amended Rule 144(k), which we expect to become effective prior to the expiration of the 180-day lock-up period, the two year holding period will have been reduced to one year. Upon the expiration of the 180-day lock-up period described below, approximately 3,685,561 shares of our common stock will be eligible for sale under amended Rule 144(k).

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchase shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of the registration statement of which this prospectus forms a part are entitled to resell such shares 90 days after the date of this prospectus in reliance on Rule 144, without having to comply with the holding period requirements or other restrictions contained in Rule 701.

Subject to the 180-day lock-up period described below, approximately 3,194,521 shares of our common stock will be eligible for sale in accordance with Rule 701.

Lock-up Agreements

Pursuant to certain "lock-up" agreements, we, our officers and directors, and substantially all of our stockholders, option holders and warrant holders have agreed, subject to certain limited exceptions, not to offer, sell, assign, transfer, pledge, lend, contract to sell, announce any intention to sell or otherwise dispose of, enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of, directly or indirectly, or to file or request the filing of any registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for shares of our common stock for a period of 180 days after the date of this prospectus. The 180-day restricted period will be automatically extended if (i) during the last 17 days of the 180-day restricted period we issue an earnings release or material news or a material event relating to us occurs or (ii) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180-day restricted period, in either of which case the restrictions described above will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. These lock-up restrictions apply to our shares of our common stock and to securities convertible into or exchangeable or exercisable for or repayable with shares of our common stock. These lock-up restrictions also apply to shares owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The lock-up restrictions will not apply under certain circumstances to transactions relating to shares of common stock acquired in this offering or in open market transactions following this offering. The lock-up restrictions also will not apply to certain transfers not involving a disposition for value, provided that the recipient agrees to be bound by these lock-up restrictions. Cowen and Company, LLC may agree, at any time or from time to time and without notice, to release for sale in the public market all or any portion of the securities subject to these restrictions.

Registration Rights

Upon completion of the offering and after giving effect to the conversion of our outstanding preferred stock, the holders, or their transferees, of an aggregate of 14,516,917 shares of our common stock, which includes 9,723,069 shares of common stock issuable upon conversion of all of our outstanding preferred stock, 3,383,177 shares of common stock held by our preferred stockholders, 1,188,451 shares of common stock issuable upon the exercise of warrants held by our preferred stockholders, and 222,220 shares of our common stock issuable upon conversion of our convertible notes, will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares held by affiliates. For additional information regarding these registration rights, see "Description of Capital Stock Registration Rights of Existing Stockholders."

Stock Options

As of September 30, 2007, we had outstanding options to purchase 3,122,331 shares of common stock, of which options to purchase 1,971,819 shares were vested. Following this offering, we intend to file a registration statement on Form S-8 under the Securities Act to register all of the shares of common stock subject to outstanding options and other awards issuable pursuant to our 2001 Stock Plan and our 2007 Stock Plan. Please see "Executive Compensation Equity Incentive Plans" for additional information regarding these plans. Accordingly, shares of our common stock registered under that registration statement will be available for sale in the open market, subject to Rule 144 volume limitations applicable to affiliates, and subject to any vesting restrictions, immediately after the 180-day lock-up period expires.

Warrants

Upon the closing of the offering, based on warrants outstanding as of September 30, 2007, we will have outstanding warrants to purchase an aggregate of 35,931 shares of our common stock at an exercise price of \$3.21 per share and 1,188,451 shares of our common stock at an exercise price of \$0.02 per share. Any shares purchased pursuant to these warrants will be "restricted shares" and may be sold in the public market only if they are registered under the Securities Act or qualify for an exemption from such registration.

UNDERWRITING

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of our common stock set forth opposite its name below. Cowen and Company, LLC is the bookrunning manager of this offering and is acting as the representative of the underwriters.

Underwriter	Number of Shares
Cowen and Company, LLC	
Leerink Swann LLC	
Total	4,500,000

The underwriting agreement provides that the obligations of the underwriters are conditional and may be terminated at their discretion based on their assessment of the state of the financial markets. The obligations of the underwriters may also be terminated upon the occurrence of the events specified in the underwriting agreement. The underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased, other than those shares covered by the overallotment option described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under applicable securities laws, including the Securities Act of 1933, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Overallotment option to Purchase Additional Shares. We have granted to the underwriters an option to purchase up to 675,000 additional shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days. The underwriters may exercise this option solely for the purpose of covering overallotments, if any, made in connection with the sale of common stock offered hereby. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table above.

Discounts and Commissions. The following table shows the public offering price, underwriting discount and proceeds, before expenses to us. These amounts are shown assuming both no exercise and a full exercise of the underwriters' option to purchase additional shares. We estimate that the total expenses of the offering, excluding underwriting discount, will be approximately \$2.6 million and are payable by us.

	Total	
Per Share	Without Overallotment	With Overallotment
Public offering price		
Underwriting discount		
Proceeds, before expenses, to us		

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The underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus. The underwriters may offer the shares of common stock to securities dealers at the public offering price less a concession not in excess of \$ per share. The underwriters may allow, and the dealers may reallocate, a discount not in excess of \$ per share to other dealers. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms.

Discretionary Accounts. The underwriters do not intend to confirm sales of the shares to any accounts over which they have discretionary authority.

Market Information. Prior to this offering, there has been no public market for shares of our common stock. The initial public offering price will be determined by negotiation between us and the representatives of the underwriters.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

We have applied for the listing of our common stock on the NASDAQ Global Market under the symbol "BGMD".

Stabilization. In connection with this offering, the underwriters may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids and purchases to cover positions created by short sales.

Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.

Overallotment transactions involve sales by the underwriters of shares of common stock in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares overallotted by the underwriters is not greater than the number of shares that they may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriters may close out any short position by exercising their overallotment option and/or purchasing shares in the open market.

Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the overallotment option. If the underwriters sell more shares than could be covered by exercise of the overallotment option and, therefore, have a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.

Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market

may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on the NASDAQ Global Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Lock-Up Agreements. Pursuant to certain "lock-up" agreements, we, our officers and directors, and substantially all of our stockholders, option holders and warrant holders have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, lend, contract to sell, announce any intention to sell or otherwise dispose of, enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of, directly or indirectly, or to file or request the filing with the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any common stock without the prior written consent of Cowen and Company, LLC, for a period of 180 days after the date of this prospectus. The 180-day restricted period will be automatically extended if (i) during the last 17 days of the 180-day restricted period we issue an earnings release or material news or a material event relating to us occurs or (ii) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180-day restricted period, in either of which case the restrictions described above will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

This lock-up provision applies to our common stock and to securities convertible into or exchangeable or exercisable for or repayable with shares of our common stock. It also applies to shares of our common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The lock-up restrictions will not apply under certain circumstances to transactions relating to shares of our common stock acquired in this offering or in open market transactions following this offering. The exceptions permit us, among other things and subject to restrictions, to: (a) issue shares of our common stock or options to purchase shares of our common stock pursuant to employee benefit plans and (b) issue shares of our common stock upon exercise of outstanding options or warrants. The exceptions permit parties to the "lock-up" agreements, among other things and subject to restrictions, to make certain gifts and other transfers for no value. In addition, the lock-up provision will not restrict broker-dealers from engaging in market making and similar activities conducted in the ordinary course of their business.

United Kingdom. Each of the underwriters has represented and agreed that:

it has not made or will not make an offer of the securities to the public in the United Kingdom within the meaning of section 102B of the Financial Services and Markets Act 2000 (as amended) (FSMA) except to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities or otherwise in circumstances which do not require the publication by us of a prospectus pursuant to the Prospectus Rules of the Financial Services Authority (FSA);

it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 or in circumstances in which section 21 of FSMA does not apply to us; and

it has complied with and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

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Switzerland. The securities will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

European Economic Area. In relation to each Member State of the European Economic Area (Iceland, Norway and Lichtenstein in addition to the member states of the European Union) that has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of the securities to the public in that Relevant Member State prior to the publication of a prospectus in relation to the securities that has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of the securities to the public in that Relevant Member State at any time:

to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;

in any other circumstances which do not require the publication by the issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

Each person in a Relevant Member State who receives any communication in respect of, or who acquires any securities under, the offer contemplated in this prospectus will be deemed to have represented, warranted and agreed to and with us and each underwriter that:

it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and

in the case of any securities acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (1) the securities acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representative of the underwriters has been given to the offer or resale; or (2) where securities have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those securities to it is not treated under the Prospectus Directive as having been made to such persons.

For the purposes of the provisions in the two immediately preceding paragraphs, the expression an "offer of the securities to the public" in relation to the securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Kuwait. By receiving this prospectus, the person or entity to whom it has been issued or provided understands, acknowledges and agrees that this prospectus has not been approved by the Central Bank of Kuwait or the Kuwait Ministry of Commerce and Industry or any authorities in Kuwait, nor have we

or any of our representatives received authorization or licensing from the Central Bank of Kuwait or the Kuwait Ministry of Commerce and Industry or any authorities in Kuwait to market or sell the common stock within Kuwait. Therefore, our common stock will not be marketed or sold from within Kuwait and no services relating to an offering, including the receipt of applications or this prospectus or both, will be rendered within Kuwait by us or our representatives. Our common stock is being offered for sale only to qualified institutional investors. Neither the common stock nor the private offering has been licensed by the Central Bank of Kuwait, the Kuwait Ministry of Commerce and Industry or any other relevant Kuwaiti government agency. No underwriter or any other party involved in the offering is licensed in Kuwait.

Jordan. This prospectus is confidential and is being furnished solely for the purpose of enabling a prospective investor to consider the purchase of our common stock. The information contained in this prospectus has been provided by us. No representation or warranty, express or implied, is made by the underwriters as to the accuracy or completeness of such information, and nothing contained in this prospectus is, or shall be relied upon as, a promise or representation by an underwriter. Any reproduction or distribution of this prospectus, in whole or in part, and any disclosure of its contents or use of any information herein for any purpose other than considering an investment in our common stock offered hereby is prohibited. Each offeree of our common stock, by accepting delivery of this prospectus, agrees to the foregoing. We have not authorized anyone to provide you with different information other than the information contained in this prospectus. If any different information is given or made, it must not be relied upon as having been authorized by any of us or the underwriters or any of their affiliates or advisers or selling agents. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus, unless expressly stated otherwise. This prospectus is not intended to provide the basis of any investment, credit or any other evaluation and should not be considered as a recommendation by us or any underwriter that any recipient of this prospectus should purchase our common stock. Each potential purchaser of our common stock should determine for itself the relevance of the information contained in this prospectus and its purchase of our common stock should be based upon such investigation as it deems necessary.

Israel. This document does not constitute a prospectus approved by the Israeli Securities Authority. Our common stock is being offered in Israel solely to investors of the categories listed in the Annex to Israeli Securities Law and possibly to a limited number of other investors, in all cases under circumstances that do not constitute an "Offering to the Public" under Section 15 of the Israeli Securities law. This document may not be reproduced or used for any other purpose or furnished to any other person other than those to whom copies have been sent. Nothing in this document should be considered "investment consulting" as defined in the Investment Consulting, Investments Marketing and Portfolio Management Law 1995.

United Arab Emirates. This prospectus does not constitute a public offer or a solicitation of purchasers of securities within the territory of the United Arab Emirates and accordingly should not be construed as such. This prospectus is not for circulation to the general public in the United Arab Emirates, nor will the common stock be offered to the general public in the United Arab Emirates. To the extent that this prospectus is circulated within the territory of the United Arab Emirates, it is being done so in relation to a private placement (i.e. a limited circle of investors) only. Accordingly, the offer and this prospectus has not been filed with, reviewed by or approved by the UAE Central Bank, the Emirates Securities and Commodities Authority, or any other United Arab Emirates governmental regulatory body or securities exchange. This prospectus must not be copied or otherwise distributed by the recipient to others.

Electronic Offer, Sale and Distribution of Our Common Stock. A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group

members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares of our common stock to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other Relationships. The underwriters and their affiliates may in the future provide investment banking, commercial banking and other financial services to us and our affiliates for which they will receive customary fees. One of our directors, Stelios Papadopoulos, Ph.D., was Vice Chairman of Cowen and Company, LLC until his retirement from Cowen and Company, LLC in August 2006. Dr. Papadopoulos will not receive, directly or indirectly, any portion of the commissions or fees that we expect to pay to Cowen and Company, LLC upon the completion of this offering.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission a registration statement on Form S-1 under the Securities Act with respect to the common stock offered by this prospectus. This prospectus, which is part of the registration statement, omits certain information, exhibits, schedules, and undertakings set forth in the registration statement. For further information pertaining to us and our common stock, reference is made to the registration statement and the exhibits and schedules to the registration statement. Statements contained in this prospectus as to the contents or provisions of any documents referred to in this prospectus are not necessarily complete, and in each instance where a copy of the document has been filed as an exhibit to the registration statement on Form S-1 of which this prospectus forms a part, reference is made to the exhibit for a more complete description of the matters involved. When we complete this offering, we will also be required to file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission. We anticipate making these documents publicly available, free of charge, on our website at www.bg-medicine.com as soon as practicable after filing such documents with the Securities and Exchange Commission.

You may read and copy any document that we file at the public reference room of the Securities and Exchange Commission at 100 F Street, N.E., Washington, D.C. 20549. Copies of the registration statement may be obtained from the Securities and Exchange Commission at prescribed rates from the public reference room at such address. You may obtain information regarding the operation of the public reference room by calling 1-800-SEC-0330. In addition, this registration statement and our future filings filed electronically with the Securities and Exchange Commission are publicly available through its website at www.sec.gov.

LEGAL MATTERS

The validity of the shares of common stock we are offering will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. Certain legal matters in connection with this offering will be passed upon for the underwriters by DLA Piper US LLP.

EXPERTS

The consolidated financial statements of BG Medicine, Inc. as of December 31, 2006, 2005 and 2004 and for each of the years then ended, appearing in this prospectus and registration statement on Form S-1 of which this prospectus forms a part, have been audited by Vitale, Caturano & Company, Ltd., independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

BG MEDICINE, INC. AND SUBSIDIARY

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
BG Medicine, Inc. and Subsidiary:

We have audited the accompanying consolidated balance sheets of BG Medicine, Inc. and subsidiary as of December 31, 2006, 2005 and 2004 and the related consolidated statements of operations, redeemable convertible preferred stock and stockholders' deficit, and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of BG Medicine, Inc. and subsidiary as of December 31, 2006, 2005 and 2004 and the results of their operations and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the financial statements, effective January 1, 2006, the Company adopted the provisions of Statement of Financial Accounting Standards No. 123R, *Share Based Payment*.

VITALE, CATURANO & COMPANY, LTD.

Boston, Massachusetts
May 31, 2007
(except for the paragraph entitled
"Investor Agreement" in Note 18 and Note 19 as to
which the dates are September 30, 2007 and
October 31, 2007, respectively)

Certified Public Accountants An Independent Member of Baker Tilly International
80 City Square, Boston, Massachusetts 02129 617 912 9000 FX 617 912 9001 www.vitale.com

BG MEDICINE, INC. AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

December 31, 2006, 2005 and 2004

	Note(s)	As of December 31,		
		2006	2005	2004
(in thousands except share and per share data)				
Assets				
Current assets				
Cash and cash equivalents	2	\$ 1,010	\$ 1,148	\$ 3,741
Short-term investments	2,3			498
Restricted cash	2	1,466		
Trade receivables	2	2,060	222	323
Prepaid expenses and other current assets		289	275	293
		4,825	1,645	4,855
Total current assets		4,825	1,645	4,855
Property and equipment, net	2,4	1,274	1,287	1,686
Deposits and other assets		70	171	138
		1,344	1,458	1,824
Total assets		\$ 6,169	\$ 3,103	\$ 6,679
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit				
Liabilities				
Current liabilities				
Accounts payable		\$ 412	\$ 420	\$ 154
Accrued expenses	6	685	630	916
Customer deposits	16	275		
Convertible promissory notes payable, including accrued interest	8		2,038	4,052
Deferred rent, current portion	14	53	31	
Deferred revenue, current portion	16	6,097	3,699	1,532
Capital lease obligations, current portion	14	318	296	87
Equipment notes payable, current portion	9	915	1,250	1,588
		8,755	8,364	8,329
Total current liabilities		8,755	8,364	8,329
Deferred rent, net of current portion	14	33	86	
Deferred revenue, net of current portion	16	1,053	1,532	864
Capital lease obligations, net of current portion	14	77	393	221
Equipment notes payable, net of current portion	9		1,111	1,724
Promissory note payable to Elan, including accrued interest	5			2,015
		9,918	11,486	13,153
Total liabilities		9,918	11,486	13,153

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

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	Note(s)	As of December 31,		
		2006	2005	2004
(in thousands except share and per share data)				
Commitments and contingencies	14,16			
Redeemable convertible preferred stock:				
Series A redeemable preferred stock; \$0.001 par value, 16,017,067 shares authorized; 15,823,566, 13,313,700 and 10,828,122 shares issued and outstanding at December 31, 2006, 2005 and 2004, respectively; at redemption value; liquidation preference of \$23,735 at December 31, 2006	2,11	\$ 23,735	\$ 19,971	\$ 16,242
Series A-1 redeemable preferred stock; \$0.001 par value, 2,475,247 shares authorized, issued and outstanding at December 31, 2006; at redemption value; liquidation preference of \$5,000 at December 31, 2006	2,11	5,000		
Total redeemable convertible preferred stock		28,735	19,971	16,242
Stockholders' deficit				
Series AE-2 preferred stock; \$.001 par value, 1,187,500 shares issued and outstanding at December 31, 2004	11			5,000
Series AE-3 preferred stock; \$.001 par value, 1,092,637 shares issued and outstanding at December 31, 2004	11			64
Series B preferred stock; \$.001 par value, 2,000,000 shares authorized; 1,138,716 shares issued and outstanding at December 31, 2006, 2005 and 2004; liquidation preference of \$1,708 at December 31, 2006	11	1,708	1,708	1,708
Common stock; \$.001 par value, 50,000,000 shares authorized; 4,701,089, 4,694,519 and 4,692,373 shares issued and outstanding at December 31, 2006, 2005 and 2004, respectively	10	5	5	5
Additional paid-in capital		1,774	1,162	719
Accumulated deficit		(35,971)	(31,229)	(30,212)
Total stockholders' deficit		(32,484)	(28,354)	(22,716)
Total redeemable convertible preferred stock and stockholders' deficit		(3,749)	(8,383)	(6,474)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit		\$ 6,169	\$ 3,103	\$ 6,679

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

BG MEDICINE, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF OPERATIONS
December 31, 2006, 2005 and 2004

	Note(s)	Year Ended December 31,		
		2006	2005	2004
(in thousands except share and per share data)				
Revenue	2	\$ 6,046	\$ 1,532	\$ 2,520
Operating Expenses				
Research and development expenses	2	7,788	7,131	8,660
General and administrative expenses		2,450	2,412	2,571
Gain on sale of property and equipment	4		(307)	(170)
Total Operating Expenses		10,238	9,236	11,061
Loss from operations		(4,192)	(7,704)	(8,541)
Gain on extinguishment of debt	5		1,035	7,228
Interest income		24	22	89
Interest expense	5,8,9,14	(574)	(1,585)	(1,463)
Other income				104
Net loss		\$ (4,742)	\$ (8,232)	\$ (2,583)
Net loss available to common stockholders	2	\$ (4,742)	\$ (8,232)	\$ (3,122)
Basic and diluted loss per share	2	\$ (1.01)	\$ (1.75)	\$ (0.67)
Basic and diluted weighted average shares outstanding		4,695,285	4,692,561	4,691,299

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

BG MEDICINE, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
December 31, 2006, 2005 and 2004
(in thousands, except share data)

	Note(s)	Series A redeemable preferred stock		Series A-1 redeemable preferred stock		Series AE-1 redeemable convertible exchangeable preferred stock		Total Redeemable Convertible Preferred Stock	Series AE-2 preferred stock		Series AE-3 preferred stock		Series B preferred stock		Common stock	
		Shares	Amount	Shares	Amount	Shares	Amount		Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
At December 31, 2003		10,828,122	\$ 16,242		\$	1,109,418	\$ 9,577	\$ 25,819	1,187,500	\$ 5,000		\$	1,376,246	\$ 2,064	4,689,991	\$ 5
Unrealized gain on marketable securities	3															
Issuance of common stock	10															2,382
Issuance of Series AE-3 preferred stock	11										510,578	64				
Cancellation of Series AE-1 redeemable convertible exchangeable preferred stock	11					(1,109,418)	(10,116)	(10,116)								
Cancellation of Series B preferred stock	11												(237,530)	(356)		
Issuance of warrants	13															
Beneficial conversion feature of convertible promissory note	8															
Accretion to redemption value of redeemable exchangeable preferred stock	11						539	539								
Stock based compensation	2,12															
Net loss																
At December 31, 2004		10,828,122	\$ 16,242		\$		\$	\$ 16,242	1,187,500	\$ 5,000	510,578	\$ 64	1,138,716	\$ 1,708	4,692,373	\$ 5
Issuance of common stock	10															2,146
Conversion of convertible promissory notes, including interest, to Series A	8	3,919,358	5,880					5,880								

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redeemable preferred stock													
Cancellation of Series A													
redeemable preferred stock	11	(1,433,780)	(2,151)					(2,151)					
Cancellation of Series AE-2 preferred stock	11							(1,187,500)	(5,000)				
Cancellation of Series AE-3 preferred stock	11									(510,578)	(64)		
Beneficial conversion feature of convertible promissory note	8												
Issuance of warrants	13												
Stock based compensation	2,12												
Net loss													
At December 31, 2005		13,313,700	\$ 19,971	\$	\$	\$ 19,971	\$	\$	\$	1,138,716	\$ 1,708	4,694,519	\$ 5
Issuance of common stock	10												6,570
Conversion of convertible promissory notes, including interest, to Series A redeemable preferred stock	11	2,509,866	3,764					3,764					
Issuance of Series A-1 redeemable preferred stock	11			2,475,247	5,000			5,000					
Beneficial conversion feature of convertible promissory note	8												
Issuance of warrants	13												
Stock based compensation	2,12												
Net loss													
At December 31, 2006		15,823,566	\$ 23,735	2,475,247	\$ 5,000	\$	\$ 28,735	\$	\$	1,138,716	\$ 1,708	4,701,089	\$ 5

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

BG MEDICINE, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

December 31, 2006, 2005 and 2004

	Note(s)	Years Ended December 31,		
		2006	2005	2004
(in thousands)				
Cash flows from operating activities				
Net loss		\$ (4,742)	\$ (8,232)	\$ (2,583)
Adjustments to reconcile net loss to net cash used in operating activities				
Depreciation and amortization	4	655	1,053	1,712
Stock-based compensation	2,12	463	100	135
Gain on the extinguishment of debt	5		(1,035)	(7,228)
Gain on sale of property and equipment	4		(307)	(170)
Non-cash interest expense	5,8	341	1,234	1,007
Changes in operating assets and liabilities				
Restricted cash		(1,466)		
Trade receivables	2	(1,838)	101	210
Prepaid expenses and other current assets		(14)	18	57
Deposits and other assets		(9)	(34)	15
Accounts payable and accrued expenses	6	47	(20)	(95)
Customer deposits	16	275		
Deferred revenue	16	1,919	2,835	(920)
Deferred rent		(31)	117	
		(4,400)	(4,170)	(7,860)
Cash flows from investing activities				
Purchases of property and equipment	4	(642)	(241)	(100)
Proceeds from the sale of property and equipment	4		365	409
Deferred equipment credit	4			(4)
Sale of short-term investments, net	2,3		498	3,098
		(642)	622	3,403
Cash flows from financing activities				
Proceeds from issuance of convertible promissory notes	8	1,550	3,000	4,500
Proceeds from issuance of Series A-1 preferred stock	11	5,000		
Proceeds from the issuance of equipment notes payable	9	500		
Proceeds from issuance of short term notes		250		
Elan restructuring payment	5		(1,000)	(500)
Payments on equipment notes payable	9	(1,855)	(957)	(1,990)
Payments on short term notes		(252)		
Principal payments on capital lease obligations	14	(292)	(89)	(229)
Proceeds from issuance of common stock	10	3	1	1
		4,904	955	1,782
Net decrease in cash and cash equivalents		(138)	(2,593)	(2,675)
Cash and cash equivalents, beginning of year		1,148	3,741	6,416

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Years Ended December 31,

Cash and cash equivalents, end of year	\$	1,010	\$	1,148	\$	3,741
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The accompanying notes are an integral part of these consolidated financial statements.

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Note(s)	Years Ended December 31,		
	2006	2005	2004

(in thousands)

Supplemental disclosure of cash flow information			
Cash paid for interest on equipment notes payable	9	\$ 232	\$ 300 \$ 407
Equipment acquired under capital lease	4		477 342
Conversion of convertible promissory notes to Series A preferred stock, including accrued interest	8	3,764	5,880
Deferred equipment credit write down	4		1,605
Cancellation of Series B preferred stock	11		356
Elan restructuring			
Issuance of promissory note	5		2,000
Issuance of Series AE-3 preferred stock	5,11		64
Cancellation of Series AE-3 preferred stock	5,11		(64)
Cancellation of Series A preferred stock	5,11		(2,151)
Cancellation of Series AE-1 preferred stock	5,11		(10,116)
Cancellation of Series AE-2 preferred stock	5,11		(5,000)
Beneficial conversion feature of convertible promissory notes	8	72	171 342
Issuance of warrants with convertible promissory notes	13	74	172 356
Accretion of Series AE-1 preferred stock	5,11		539

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

BG MEDICINE, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the Years Ended December 31, 2006, 2005 and 2004

1. Description of Business

BG Medicine, Inc. ("BG Medicine" or the "Company") was incorporated under the laws of the State of Delaware on February 9, 2000 and later that year chose the name Beyond Genomics, Inc. The Company changed its name to BG Medicine, Inc. in 2004. The Company is a life sciences company focused on the discovery, development and commercialization of novel molecular diagnostics based on biomarkers to improve patient outcomes and contain healthcare costs. The Company's molecular diagnostic tests are designed to predict a patient's response to a drug therapy, determine the potential toxicity of therapeutic agents to patients, identify patients who have or are likely to develop a specific disease, predict a patient's prognosis once a disease has been diagnosed and monitor a patient's disease progression or drug response. The Company's platform is the discovery engine that enables the Company to identify new biomarkers by integrating and automating the measurement, analysis, characterization and interpretation of proteins and small non-protein biological molecules, or metabolites, collected from bodily fluids. The Company has collaborations and initiatives with major pharmaceutical companies, the U.S. Food and Drug Administration ("FDA") and other healthcare organizations. The Company has created a broad product pipeline that focuses on cardiovascular disease, cancer and CNS disorders.

2. Significant Accounting Policies

Basis of Presentation

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America. The consolidated financial statements include the accounts of the Company and for the period from October 24, 2004 through April 27, 2005, its subsidiary, BG Newco Ltd., a limited company organized under the laws of Bermuda ("BG Newco"), through the date of its dissolution (Note 5). All intercompany accounts and transactions have been eliminated in consolidation.

There are significant risks associated with the Company including, but not limited to, rapid technological change, competition from existing providers and new entrants, price and product competition, lack of operating history, expansion of operations and dependence on key members of the management team.

The Company had unrestricted cash and cash equivalents of approximately \$1,010,000, \$1,148,000 and \$3,741,000 at December 31, 2006, 2005 and 2004. The Company believes that the unrestricted cash and cash equivalents on hand at December 31, 2006, in combination with the availability of restricted cash under the HRP initiative, cash expected to be generated from operations in 2007 and funding available under the agreement with the Company's current investors described in Note 18, will be sufficient to meet the Company's working capital, debt service and capital expenditure requirements through at least December 31, 2007.

As further described in Note 5, in April 2001 the Company entered into a joint venture agreement with Elan Corporation, plc ("Elan"). The Company and an Elan subsidiary, Elan International Services, Ltd. ("EIS") formed a joint venture, BG Newco. The transaction also involved other Elan subsidiaries, namely Elan Pharma International Limited ("EPIL") and Neuralab Limited ("Neuralab"). Elan Corporation, plc along with its subsidiaries and affiliates, are collectively referred to as "Elan."

From its inception to October 28, 2004, the Company and Elan owned 80.1% and 19.9%, respectively, of the outstanding capital stock of BG Newco. During this period, Elan retained significant

minority rights that were considered "participating rights" as defined in the Emerging Issues Task Force ("EITF") Issue No. 96-16, *Investor's Accounting for an Investee When the Investor Has a Majority of the Voting Interest but the Minority Shareholder or Shareholders Have Certain Approval or Veto Rights* ("EITF 96-16"). As discussed further in Note 5, the Company accounted for BG Newco using the equity method during this time. The Company consolidated the financial statements of BG Newco from October 28, 2004 through April 27, 2005, as BG Newco was a wholly owned subsidiary. BG Newco was dissolved on April 27, 2005.

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and contingent liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported periods. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments which mature within three months from date of purchase to be cash equivalents. Such investments are carried at cost, which approximates fair value. Cash equivalents, which consist primarily of money market investments, amounted to \$2,000, \$41,000 and \$3,666,000 at December 31, 2006, 2005 and 2004, respectively.

Restricted Cash

Restricted cash of approximately \$1,466,000 at December 31, 2006 consisted of cash received under the HRP initiative described in Note 16. This cash is to be used solely to fund the efforts under this initiative.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, which include cash and cash equivalents, short-term investments, accounts receivable, accounts payable, accrued expenses, capital lease obligations, notes payable and promissory notes, approximate their fair values at December 31, 2006, 2005 and 2004.

Short-Term Investments

The Company invests excess cash balances in short-term marketable securities, primarily high-grade corporate notes and bonds. These investments are considered available-for-sale. Gains or losses on the sale of investments classified as available-for-sale, if any, are recognized on the specific identification method. Unrealized gains or losses are treated as a separate component of stockholders' equity until the security is sold or until a decline in fair market value is determined to be other than temporary. There were no realized gains or losses on sales of marketable securities in 2006, 2005 or 2004.

Trade Receivables

Accounts receivable are stated at the amount management expects to collect from outstanding balances. Allowances for doubtful accounts and other adjustments are provided for those outstanding balances considered to be uncollectible based upon historical experience and management's evaluation of the outstanding balances at year end. Bad debts are written off against the allowance when identified and offset by recoveries when received. There was no allowance for doubtful accounts at December 31, 2006, 2005 and 2004.

Concentration of Credit Risk and Significant Customers

Financial instruments that potentially subject the Company to concentration of credit risk consist of cash, cash equivalents, short-term investments and trade receivables. Cash and cash equivalents are deposited with high credit quality financial institutions. Short-term investments consist of short-term marketable securities, primarily high-grade corporate notes and bonds. To reduce credit risk associated with trade receivables, the Company routinely assesses the financial strength of its customers and, as a consequence, believes that trade receivable credit risk exposure is limited. The Company does not require collateral from its customers. At December 31, 2006, one customer represented 83% of accounts receivable and in 2006 four customers represented 33%, 25%, 18% and 18% of revenue. At December 31, 2005, one customer represented 100% of accounts receivable and in 2005 one customer represented 100% of revenue. At December 31, 2004, three customers represented 46%, 31% and 23% of accounts receivable and in 2004 three customers represented 56%, 20% and 15% of revenue.

Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over their estimated useful lives. Property and equipment held under capital leases, which involve a transfer of ownership, are amortized over the shorter of the lease term and the estimated useful life of the related asset. Upon sale or retirement, the cost and accumulated depreciation are eliminated from their respective accounts, and the resulting gain or loss is included in income or loss for the period. Repair and maintenance expenditures are charged to expense as incurred.

Revenue Recognition

The Company recognizes revenue in accordance with the U.S. Securities and Exchange Commission's ("SEC") Staff Accounting Bulletin No. 104, *Revenue Recognition* ("SAB 104"). Revenue is recognized when the following criteria have been met: (i) persuasive evidence of an arrangement exists; (ii) delivery has occurred and risk of loss has passed; (iii) the seller's price to the buyer is fixed or determinable; and (iv) collectibility is reasonably assured.

The Company's revenue is generated through initiatives, collaborations and biomarker discovery and analysis services agreements. The services the Company provides under these agreements typically include the integrated analysis of preclinical and/or clinical samples to identify biomarkers related to disease mechanisms or drug effects. In some cases, the Company has retained rights to the biomarkers identified in the course of these collaborations. The terms of the agreements typically include nonrefundable license fees, funding of research and development, and payments based upon

achievement of certain milestones. Revenue arrangements where multiple products or services are sold together under one contract are evaluated to determine if each element represents a separate unit of accounting as defined in EITF Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables* ("EITF 00-21"). EITF 00-21 requires the following criteria to be met for an element to represent a separate unit of accounting: (i) the delivered items have value to a customer on a stand-alone basis; (ii) there is objective and reliable evidence of the fair value of the undelivered items; and (iii) delivery or performance is probable and within the control of the vendor for any delivered items that have a right of return.

In the event that an element in a multiple element arrangement does not represent a separate earnings process and a separate unit of accounting, the Company recognizes revenue from this element over the term of the related contract or as the undelivered items are delivered.

When the Company has continuing performance obligations under the terms of a collaborative arrangement, nonrefundable license fees are recognized as revenue over the period in which performance obligations are completed. Revenue from milestone payments related to arrangements under which no continuing performance obligations exist are recognized upon achievement of the related milestone only if all of the following conditions are met: (i) it represents a separate unit of accounting as defined by EITF 00-21; (ii) the milestone payments are nonrefundable; (iii) substantive effort is involved in achieving the milestone; and (iv) the amount of the milestone is reasonable in relation to the effort expended or the risk associated with achievement of the milestone. If any of these conditions is not met, the milestone payments are deferred and recognized as revenue over the term of the arrangement as the Company completes its performance obligations.

Payments received from biomarker discovery and analysis services agreements are recognized as revenue ratably unless evidence indicates an alternative earnings pattern can be demonstrated over the term of the arrangement or the expected service period, whichever is longer.

Deferred revenue represents primarily upfront fees or prepayment of services where the Company has continuing performance obligations. A portion of the deferred revenue relates to services that are expected to be performed beyond one year.

Research and Development Costs

Research and development costs, both internal and those related to research and development collaborations, are expensed as incurred. Research and development expenses include labor, materials and supplies, and overhead.

Accounting for Stock-Based Compensation

The Company adopted Statement of Financial Accounting Standards ("SFAS") No. 123R, *Share-Based Payment* ("SFAS No. 123R"), using the modified prospective method as of January 1, 2006 and therefore has not restated results from prior periods. Under this method, stock-based compensation expense for the year ended December 31, 2006 includes compensation expense for all stock-based awards granted prior to, but not yet vested as of January 1, 2006, and is calculated based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123, *Accounting for Stock-Based Compensation* ("SFAS No. 123"), and related pronouncements. Stock-based

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compensation expense for all stock-based awards granted after January 1, 2006 is based on the grant-date fair value estimated in accordance with SFAS No. 123R. As required by SFAS No. 123R, the Company has made an estimate of expected forfeitures and is recognizing compensation costs only for those stock-based awards expected to vest.

As permitted by SFAS No. 123, the Company historically accounted for share-based payments to employees using the intrinsic value method under Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock Issued to Employees*.

On November 10, 2005, the Financial Accounting Standards Board ("FASB") issued FASB Staff Position SFAS 123R-3, *Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards*. The Company has elected to adopt the alternative transition method provided by the FASB Staff Position for calculating the tax effects (if any) of stock-based compensation expense pursuant to SFAS 123R. The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool related to the tax effects of employee stock-based compensation, and to determine the subsequent impact to the additional paid-in capital pool and the consolidated statements of operations and cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS 123R.

The pro forma table below reflects the effect of recording stock-based compensation for the years ended December 31, 2005 and 2004 as if the Company had applied the fair value recognition provisions of SFAS No. 123:

	2005	2004
	(in thousands)	
Net loss available to common stockholders	\$ (8,232)	\$ (3,122)
Add: Total recorded stock-based compensation	100	135
Deduct: Total stock-based compensation under the fair value method for all awards	(238)	(248)
	\$ (8,370)	\$ (3,235)
Pro forma net loss		
	\$ (1.78)	\$ (0.69)
Pro forma per share net loss		

The weighted average grant-date fair value for options granted during 2006, 2005 and 2004 was \$3.96, \$0.11 and \$0.11 per share, respectively. The fair value of options at date of grant was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2006	2005	2004
Risk-free interest rate	4.50%-4.71%	3.64-4.36%	3.12-3.94%
Expected dividend yield	0%	0%	0%
Expected life	6.25 years	5 years	5 years
Expected volatility	68.4%-69.8%	100%	100%

The Company does not have a history of market prices of the common stock as it is not a public company, and as such volatility is estimated in accordance with Staff Accounting Bulletin No. 107,

Share-Based Payment ("SAB 107"), using historical volatilities of similar public entities. The expected life of the awards is estimated based on the simplified method, as defined in SAB 107.

Income Taxes

The Company uses the liability method of accounting for income taxes. Under the liability method, deferred tax assets and liabilities reflect the impact of temporary differences between amounts of assets and liabilities for financial reporting purposes and such amounts as measured under enacted tax laws. A valuation allowance is required to offset any net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax asset will not be realized.

Redeemable Preferred Stock

In accordance with EITF Topic D-98, *Classification and Measurement of Redeemable Securities*, the Company classifies its redeemable preferred stock outside of permanent equity. The carrying value of redeemable preferred stock is increased by periodic accretion to account for accrued but unpaid dividends. These increases are effected through charges against additional paid-in capital, if any, and then to the accumulated deficit.

Loss per Common Share

Basic loss per common share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period. Except where the result would be antidilutive to income before continuing operations, diluted net loss per common share is calculated by dividing net loss by the sum of the weighted average number of common shares plus common stock equivalents, if applicable. Options and warrants to purchase common stock and preferred stock issued by the Company are considered anti-dilutive and are not used in the calculation of loss per common share. Options to purchase common stock excluded from the calculation of loss per common share were 3,000,091, 2,662,168 and 2,607,505 for the years ended December 31, 2006, 2005 and 2004, respectively. Warrants to purchase common stock excluded from the calculation were 1,332,011, 1,238,575 and 895,899 for the years ended December 31, 2006, 2005 and 2004, respectively. The number of shares of common stock issuable upon conversion of preferred stock excluded from the calculation of the loss per common share were 9,082,947, 6,753,460 and 6,657,459 for the years ended December 31, 2006, 2005 and 2004, respectively.

The following table reflects the reconciliation of net loss to net loss available for common stock.

	<u>2006</u>	<u>2005</u>	<u>2004</u>
	(in thousands)		
Net loss reported	\$ (4,742)	\$ (8,232)	\$ (2,583)
Deduct: Dividends on Series AE-1 preferred stock			(539)
Net loss available for common stock	<u>\$ (4,742)</u>	<u>\$ (8,232)</u>	<u>\$ (3,122)</u>

The Company calculates net loss per share in accordance with SFAS No. 128, *Earnings Per Share*, as clarified by EITF Issue No. 03-6, *Participating Securities and the Two-Class Method Under FASB*

Statement No. 128, Earnings Per Share. EITF Issue No. 03-6 clarifies the use of the "two-class" method of calculating earnings per share as originally prescribed in SFAS No. 128. Effective for periods beginning after March 31, 2004, EITF Issue No. 03-6 provides guidance on how to determine whether a security should be considered a "participating security" for purposes of computing earnings per share and how earnings should be allocated to a participating security when using the two-class method for computing basic earnings per share. The Company has determined that its redeemable convertible preferred stock represents a participating security and therefore has applied the provisions of EITF Issue No. 03-6.

Under the two-class method, basic net loss per share is computed by dividing the net loss applicable to common stockholders by the weighted average number of common shares outstanding for the fiscal period. Diluted net loss per share is computed using the more dilutive of (a) the two-class method or (b) the if-converted method. The Company has allocated net income first to preferred stockholders equal to the accretion of a discount and dividends on the outstanding preferred stock and then to preferred and common stockholders based on ownership interests. Net losses are not allocated to preferred stockholders. Diluted net loss per share is the same as basic net loss per share as losses have been allocated to the common stockholders for all periods presented.

Segment Reporting

Statement of Financial Accounting Standards No. 131, *Disclosures about Segments of an Enterprise and Related Information* ("SFAS No. 131"), establishes standards for reporting information on operating segments in interim and annual financial statements. The Company operates in one segment, the business of collaborative research and development.

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Other comprehensive loss includes certain changes in stockholders' equity that are excluded from net loss. Other comprehensive loss includes unrealized gains and losses on the Company's available-for-sale securities. Accumulated other comprehensive loss as of December 31, 2006, 2005 and 2004 included \$0, \$0 and \$1,000 of unrealized gains (losses) on marketable securities. Total comprehensive loss consisted of the following at December 31:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
	(in thousands)		
Unrealized gain on marketable securities	\$	\$	\$ 1
Net loss	(4,742)	(8,232)	(2,583)
Total comprehensive loss	\$ (4,742)	\$ (8,232)	\$ (2,582)

Recent Accounting Pronouncements

In June 2006, the Financial Accounting Standards Board ("FASB") issued FASB Interpretation No. 48 ("FIN 48"), *Accounting for Uncertainty in Income Taxes - an interpretation of FASB Statement No. 109*. This interpretation addresses the recognition and measurement of tax positions to be reported

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on an entity's tax return as they relate to the positions being taken on the financial statements. FIN 48 is effective for financial statements issued for fiscal periods beginning after December 15, 2006. The Company believes the impact of the adoption of FIN 48 will not be material to the Company's financial position and results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements ("SFAS No. 157")*. SFAS No. 157 provides guidance for using fair value to measure assets and liabilities. It establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS No. 157 is effective for financial statements issued for the first interim period after November 15, 2007 or January 1, 2008. The Company is currently evaluating the impact the adoption of SFAS No. 157 will have on the Company's financial position and results of operations.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities ("SFAS No. 159")*. The purpose of the statement is to expand the use of fair value measurement and thus decrease the occurrence of measuring assets and liabilities differently. SFAS No. 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007. The Company is currently evaluating the impact the adoption of SFAS No. 159 will have on the Company's financial position and results of operations.

3. Investment in Debt and Equity Securities

The cost and fair value of marketable debt and equity securities at December 31, 2004, were as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(in thousands)				
Available for sale				
Commercial paper	\$ 249	\$	\$	\$ 249
U.S. Government Agency Securities	249			249
	\$ 498	\$	\$	\$ 498
Totals	\$ 498	\$	\$	\$ 498

Available-for-sale securities are carried in the financial statements at fair value. Net unrealized holding gains on available-for-sale securities in the amount of \$0, \$0 and \$1,000 for the years ended December 31, 2006, 2005 and 2004, respectively, have been included in accumulated other comprehensive income.

There were no individual securities that have been in a continuous loss position during the years ended December 31, 2006, 2005 and 2004 or any securities with gross unrealized losses at December 31, 2006, 2005 and 2004.

4. Property and Equipment

Property and equipment consists of the following as of December 31:

	<u>Estimated Useful Life</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>
		(in thousands)		
Laboratory equipment	3-4 years	\$ 2,750	\$ 2,481	\$ 3,100
Laboratory equipment under capital lease	4 years	811	764	342
Computer equipment	3 years	2,306	2,015	1,935
Office furniture	5 years	146	135	128
Leasehold improvements	4 years	824	800	606
		<u>6,837</u>	<u>6,195</u>	<u>6,111</u>
Less: Accumulated depreciation and amortization		(5,563)	(4,908)	(4,425)
Property and equipment, net		<u>\$ 1,274</u>	<u>\$ 1,287</u>	<u>\$ 1,686</u>

In connection with the strategic partnership entered into with Micromass, UK Ltd., a subsidiary of Waters Corporation ("Waters"), as described in Note 16, the Company accounted for the difference between (i) the proceeds received from equity payments and (ii) the then-deemed fair market value of the Company's Series B preferred stock purchased by Waters Technologies Corporation, a subsidiary of Waters, which approximated \$1,155,000 in 2003, as deferred equipment credit. These credits were being applied against laboratory equipment purchases on a pro rata basis.

Effective April 9, 2004, Waters agreed to release the Company fully and irrevocably from its remaining purchase obligations in the amount of \$3,058,000. With this release, the Company's obligations were regarded as satisfied in full, and the Company has no present or future payment, purchase order or other obligations to Waters. Accordingly, the remaining deferred equipment credit balance, as of April 9, 2004, was applied to the book value of the Company's previous purchased equipment from Waters, resulting in a laboratory equipment write-down of \$1,605,000. For the year ended December 31, 2004, the Company applied \$1,609,000 of the deferred equipment credits to laboratory equipment purchased from Waters.

Depreciation and amortization expense for the years ended December 31, 2006, 2005 and 2004 was \$655,000, \$1,053,000 and \$1,712,000, respectively. Included in depreciation and amortization expense was amortization expense of property and equipment under capital leases for the years ended December 31, 2006, 2005 and 2004 which was \$269,000, \$118,000 and \$199,000, respectively. At December 31, 2006, 2005, and 2004, accumulated amortization for equipment under capital leases was \$415,000, \$146,000 and \$28,000.

For the years ended December 31, 2006, 2005 and 2004, the Company realized gains on the sale of laboratory equipment in the amount of \$0, \$307,000 and \$170,000, respectively.

5. Transaction with Elan

In April 2001, the Company entered into a joint venture agreement with Elan Corporation. The Company and an Elan subsidiary, EIS, formed a joint venture, BG Newco (the "BG Newco Arrangement"). The transaction also involved other Elan subsidiaries, namely EPIL and Neuralab.

In connection with this transaction, EIS purchased from the Company 1,109,418 shares of Series AE-1 exchangeable convertible preferred stock ("Series AE-1 preferred stock") and 1,187,500 shares of Series AE-2 preferred stock, for a purchase price of \$8,010,000 and \$5,000,000, respectively. The terms of the preferred stock are described in Note 11.

The Series AE-1 preferred stock was, at EIS' option, convertible under certain circumstances into the Company's common stock at no less than \$15.45 per share or exchangeable (the "Exchange Right") for nonvoting preference shares of BG Newco ("Newco Preference Shares"), originally issued to the Company and representing 30.1% of the aggregate outstanding shares of BG Newco ("Aggregate Newco Shares"). The issuance of the Series AE-1 preferred stock and the acquisition of the 80.1% Aggregate Newco Shares were simultaneously completed in the form of a noncash exchange. The BG Newco Arrangement provided for EIS to acquire 19.9% of the Aggregate Newco Shares for \$1,990,000 and for BG Newco to transfer, in a noncash transaction, the aggregate value of \$10,000,000 to Neuralab, for a nonexclusive license giving BG Newco rights to use certain intellectual property from Neuralab and Elan Corporation. Upon BG Newco's completing this transaction, the cost of this license was expensed as a research and development cost by BG Newco as the technology acquired had not yet reached technological feasibility and there was no alternative future use for the technology. The Company's share of this expense was \$8,010,000 and was included in the Equity in loss of BG Newco in the statement of operations for the year ended December 31, 2001.

BG Newco was formed by issuing BG Newco's common stock valued at \$10,000,000 to the Company and EIS. Although EIS only owned 19.9% of BG Newco common stock from its inception to the period ended October 28, 2004, it retained significant minority investor rights that the Company considered to be "participating rights" as defined in EITF 96-16. EIS' participating rights prevented the Company from exercising sole control over BG Newco. Accordingly, the Company did not consolidate the financial statements of BG Newco from its inception to the year ended December 31, 2003, but instead accounted for its investment in BG Newco during this period under the equity method. Upon termination of the joint venture agreement in 2004, as discussed below, the Company consolidated the financial statements of BG Newco for the period from October 28, 2004 through April 27, 2005.

The Company and EIS funded BG Newco on a pro rata basis based on their respective ownership interests. As further discussed below, the Company had the ability, until April 2003, to borrow upon a convertible promissory note ("Development Note") with EPIL up to a maximum of \$8,010,000 to meet its obligations under this agreement. The full amount of the note had been drawn upon as of April 24, 2003.

Development and EPIL Notes

In April 2001, the Company issued a convertible promissory note to EPIL under which the Company could borrow up to \$8,010,000. The full amount of the note was drawn upon as of April 24, 2003. The proceeds of the Development Note were used solely to fund the Company's portion of BG Newco's research and development work ("Development Funding"), in accordance with the provisions of a joint development and operating agreement between the Company, Elan Corporation, EIS and BG Newco.

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The Development Note could have been converted by EPIL into shares of the Company's common stock at any time after the third anniversary of the original issuance date or (i) at any time in the event of a firm commitment of an underwritten public offering of the Company's common stock in the United States for gross proceeds of at least \$20 million, subject to certain limitations, or (ii) upon a merger, consolidation or reorganization involving the Company in which the stockholders' immediately prior to such an event owned 50% or less of the equity of the surviving corporation. The conversion price, which was subject to adjustment, was to be no less than \$11.26 per share.

The Development Note provided for interest to accrue at the rate of 10% per annum compounded on a semiannual basis. Interest accrued on the Development Note was not paid in cash, but added to the principal amount outstanding on the Development Note. The Development Note required no payments until maturity on April 20, 2007, at which time the principal and unpaid accrued interest would have become due and payable. At October 28, 2004, the date of termination (see below), and December 31, 2003, the Company had an accrued interest balance on the Development Note of \$1,717,000 and \$967,000, respectively. At any time prior to the conversion, the Company had the right to prepay a total of \$3,000,000 of the outstanding principal plus accrued interest thereon in cash. Additionally, if EIS elected to exercise the Exchange Right associated with the Series AE-1 preferred stock, EIS would have paid the Company an amount equal to 30.1% of the aggregate amount of the Development Funding provided to BG Newco by the Company and EIS. Such payment would have been, at EIS' option, in the form of either cash or cancellation of a like portion of the Development Note and accrued interest thereon.

On September 27, 2004, the Company and Elan Corporation, along with its affiliates, entered into an agreement to terminate the BG/Elan Joint Venture. Pursuant to the agreement, the joint venture collaboration between Elan and the Company was officially terminated. The Company became the sole owner of BG Newco and all of its related assets, intellectual property and data. Any remaining biological samples and intellectual property licensed to the joint venture were returned to Elan. Elan transferred the Series AE-1 Convertible Exchangeable Preferred Stock back to the Company. Elan cancelled its convertible promissory note due from the Company in the amount \$8,010,000, plus accrued interest due April 21, 2007. Additionally, the Company paid Elan \$500,000 and issued Elan 1,092,637 shares of a newly created, non-voting, class of Series AE-3 preferred stock. The Series AE-3 Preferred Stock had at the time senior liquidation preference to all other classes of preferred stock. The Company issued Elan a \$2,000,000 promissory note, accruing interest at a rate of 4.20% annually, due on April 30, 2010. The transaction became effective on October 28, 2004.

The Company recorded a gain on extinguishment of debt for the year ended December 31, 2004 for the difference between the convertible promissory note, plus accrued interest, and the new promissory note and the \$500,000 cash payment, in the amount of \$7,228,000. The retirement of the Series AE-1 Convertible Exchangeable Preferred Stock was recorded as an adjustment to the Company's accumulated deficit.

In 2005, the Company and Elan came to further agreement to exchange all of Elan's equity and debt holdings in the Company in exchange for a payment of \$1,000,000. Elan transferred its Series A, Series AE-2, and Series AE-3 preferred stock back to the Company. Elan also cancelled its promissory note due from the Company in the amount of \$2,000,000, plus accrued interest. The transaction became effective on March 28, 2005. The Company recorded a gain on extinguishment of debt for the

year ended December 31, 2005 for the difference between the promissory note, plus accrued interest, and the \$1,000,000 cash payment, in the amount of \$1,035,000. The retirement of the Series A, Series AE-2, and Series AE-3 preferred stock was recorded as an adjustment to the Company's accumulated deficit.

6. Accrued Expenses

Accrued expenses at December 31 consist of:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
	(in thousands)		
Employee compensation and related costs	\$ 336	\$ 245	\$ 323
Consulting and service agreements	153	137	280
Professional service fees	93	155	119
Licensing fees	80	80	126
Taxes			32
Other	23	13	36
	<u> </u>	<u> </u>	<u> </u>
Total accrued expenses	<u>\$ 685</u>	<u>\$ 630</u>	<u>\$ 916</u>

7. Income Taxes

The Company had no income tax provision during the period from inception through December 31, 2006, since the Company had a taxable net loss during this period. Components of the net deferred tax asset at December 31, 2006, 2005 and 2004 are as follows:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
	(in thousands)		
Net operating loss carryforwards	\$ 2,372	\$ 1,163	\$ 731
Tax credit carryforwards	2,457	1,674	1,315
Capitalized start-up costs		22	108
Capitalized research and development costs	8,435	5,832	6,652
Deferred revenue	2,455	1,234	965
Other temporary differences	682	1,033	833
	<u> </u>	<u> </u>	<u> </u>
	16,401	10,958	10,604
Valuation allowance	(16,401)	(10,958)	(10,604)
	<u> </u>	<u> </u>	<u> </u>
Net deferred tax asset	<u>\$</u>	<u>\$</u>	<u>\$</u>

In assessing the realizability of net deferred tax assets, management considers whether it is more likely than not that some portion of the net deferred tax assets will not be realized. The ultimate realization of net deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences representing net future deductible amounts become deductible. Management has established a full valuation allowance against the net deferred tax assets at

December 31, 2006, 2005 and 2004 since it is more likely than not that these future tax benefits will not be realized.

At December 31, 2006, 2005 and 2004, the Company had available federal net operating loss carryforwards of \$5,900,000, \$2,700,000 and \$1,815,000, respectively. In addition, the Company had federal and state research and development credit carryforwards of \$2,500,000, \$2,100,000 and \$1,315,000, respectively. The net operating loss and credit carryforwards may be used to offset future federal income taxes and expire at various dates through 2026. However, changes in the Company's ownership as defined in the U.S. Internal Revenue Code, may limit the Company's ability to utilize the net operating loss and tax credit carryforwards. The Company paid no income tax for the years ended December 31, 2006, 2005 and 2004. During 2006, the valuation allowance increased by approximately \$2,129,000.

8. Convertible Promissory Notes

On October 28, 2004, the Company issued \$4,500,000 of senior convertible promissory notes ("2004 Convertible Notes") to various investors. The principal amount of the 2004 Convertible Notes, plus unpaid interest which accrued at a rate of 10% per annum, was due and payable upon demand of the holders of 66²/₃% of the principal amount of the 2004 Convertible Notes any time on or after July 28, 2005 ("Maturity Date"), unless sooner accelerated upon an event of default or liquidation or sale/merger of the Company.

In conjunction with the issuance of the 2004 Convertible Notes, the Company issued warrants ("2004 Convertible Note Warrants") to purchase such number of shares of common stock equal to 50% of the principal amount of the 2004 Convertible Notes divided by the price established at the next equity financing, as defined, with an exercise price of \$0.02 per share. In the event that the next equity financing had not occurred by the Maturity Date, or in the event of a sale or merger of the Company prior to the next equity financing, the 2004 Convertible Note Warrants, as amended, could, at the sole discretion of the holder of such warrant, become exchangeable for warrants to purchase such number of shares of the Company's common stock equal to 50% of the outstanding principal of the 2004 Convertible Notes divided by \$1.50 (the original purchase price of the Series A Preferred Stock) with an exercise price of \$0.02 per share. The 2004 Convertible Note Warrants are exercisable for a period of ten years from date(s) of issuance thereof, and contain provisions permitting the holders to effect a "cashless" exercise.

The 2004 Convertible Notes had a conversion feature which allowed the holders to convert to a new class of preferred stock at the time and price of the Company's next financing of at least \$5,000,000. In accordance with APB Opinion No. 14, *Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants*, the Company allocated the proceeds received in the financing transaction between the convertible instrument to the convertible instrument and the warrants on a relative fair value basis. In accordance with EITF 98-05, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios* and EITF 00-27, *Application of Issue No. 98-05 to Certain Convertible Instruments*, the Company recognized and measured the embedded beneficial conversion feature by allocating a portion of the proceeds equal to the intrinsic value of that feature to additional paid-in capital. The beneficial conversion feature was calculated at the commitment date as the difference between the conversion price and the fair value of the common

stock or other securities into which the security is convertible, multiplied by the number of shares into which the security is convertible. For convertible debt securities, any recorded discount resulting from allocation of proceeds to the beneficial conversion feature was recognized as interest expense over the minimum period from the date of issuance to the date at which the debt holder can realize that return.

The 2004 Convertible Note Warrants were valued using the Black-Scholes model and the following assumptions: volatility of 100%; no dividend yield, risk-free rate of 4.40%; and an expected life of ten years, resulting in a value of \$371,000. The relative fair value of the 2004 Convertible Notes and Warrants was \$4,158,000 and \$342,000, respectively. The discount to the 2004 Convertible Notes was charged to interest expense over the expected life of the 2004 Convertible Notes, 273 days. The difference between the effective conversion price and the fair value of the securities into which the debt is convertible at the commitment date resulted in a beneficial conversion feature of approximately \$342,000. The beneficial conversion feature was recorded as a discount to the 2004 Convertible Notes and an increase to additional paid in capital. The Company also incurred \$45,000 of legal expenses associated with this financing. These costs were capitalized as deferred financing costs and were charged to interest expense over the expected life of the 2004 Convertible Notes.

The Company issued \$1,000,000 of additional convertible notes on March 29, 2005 to the same set of investors ("March 2005 Convertible Notes"). The terms were equivalent to those of the October 28, 2004 Convertible Notes and Warrants were also issued at 50% coverage. The March 2005 Convertible Note Warrants were valued using the Black-Scholes model and the following assumptions: volatility of 100%; no dividend yield; risk-free rate of 4.40%; and an expected life of ten years, resulting in a value of \$81,000. The relative fair value of the March 2005 Convertible Notes and Warrants was \$924,000 and \$76,000, respectively. The discount to the March 2005 Convertible Notes was charged to interest expense over the expected remaining life of the March 2005 Convertible Notes, 122 days. The difference between the effective conversion price and the fair value of the securities into which the debt was convertible at the commitment date resulted in a beneficial conversion feature of approximately \$76,000. The beneficial conversion feature was recorded as a discount to the March 2005 Convertible Notes and an increase to additional paid in capital.

Interest expense was recorded for the years ended December 31, 2005 and 2004 related to the 2004 and March 2005 Convertible Note Warrants and the beneficial conversion feature of the 2004 and March 2005 Convertible Notes in the amount of \$679,000 and \$158,000, respectively.

The 2004 and March 2005 Convertible Notes including accrued interest of approximately \$379,000 converted into 3,919,358 shares of Series A preferred stock (Note 11) on August 24, 2005 at a conversion price of \$1.50 per share.

From September to December 2005, the Company issued an aggregate \$2,000,000 of senior convertible promissory notes in \$500,000 increments ("2005 Convertible Notes") to various investors. The principal amount of the 2005 Convertible Notes, plus unpaid interest which accrued at a rate of 10% per annum, was due and payable upon demand of the holders of $66\frac{2}{3}\%$ of the principal amount of the Convertible Notes, unless sooner accelerated upon an event of default or liquidation or sale/merger of the Company.

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In conjunction with the issuance of the 2005 Convertible Promissory Notes, the Company issued warrants ("2005 Convertible Note Warrants") to purchase such number of shares of common stock equal to 30% of the principal amount of the 2005 Convertible Notes divided by the next equity price, with an exercise price of \$0.02 per share. In the event that the next equity financing had not occurred by the maturity date, or in the event of a sale or merger of the Company prior to the next equity financing, the 2005 Convertible Note Warrants could, at the sole discretion of the holder of such warrant, become exchangeable for warrants to purchase such number of shares of the Company's common stock equal to 30% of the outstanding principal of the 2005 Convertible Notes divided by \$3.21 (the original purchase price of the Series A Preferred Stock) with an exercise price of \$0.02 per share. The 2005 Convertible Note Warrants are exercisable for a period of ten years from date(s) of issuance thereof, and contain provisions permitting the holders to effect a "cashless" exercise.

The 2005 Convertible Note Warrants were valued using the Black-Scholes model and the following assumptions: volatility of 100%; no dividend yield; risk-free rate of 4.40%; and an expected life of ten years, resulting in a value of \$99,000. The relative fair value of the 2005 Convertible Notes and 2005 Convertible Note Warrants was \$1,906,000 and \$94,000, respectively. The discount to the 2005 Convertible Notes was charged to interest expense immediately as the 2005 Convertible Notes were due on demand. The difference between the effective conversion price and the fair value of the securities into which the debt was convertible at the commitment date resulted in a beneficial conversion feature of approximately \$96,000. The beneficial conversion feature was recorded as a discount to the 2005 Convertible Notes and an increase to additional paid in capital.

Interest expense was recorded for the years ended December 31, 2006 and 2005 related to the 2005 Convertible Note Warrants and the beneficial conversion feature of the 2005 Convertible Notes in the amount of \$0 and \$190,000, respectively.

On March 10, 2006 and July 10, 2006, the Company issued \$1,050,000 and \$500,000, respectively, of senior convertible promissory notes ("2006 Convertible Notes") to various investors. The principal amount of the 2006 Convertible Notes, plus unpaid interest which accrued at a rate of 10% per annum, was due and payable upon demand of the holders of $66\frac{2}{3}\%$ of the principal amount of the Convertible Notes, unless sooner accelerated upon an event of default or liquidation or sale/merger of the Company.

In conjunction with the issuance of the 2006 Convertible Promissory Notes, the Company issued warrants ("2006 Convertible Note Warrants") to purchase such number of shares of common stock equal to 30% of the principal amount of the 2006 Convertible Notes divided by the next equity price, with an exercise price of \$0.02 per share. In the event that the next equity financing had not occurred by the maturity date, or in the event of a sale or merger of the Company prior to the next equity financing, the 2006 Convertible Note Warrants could, at the sole discretion of the holder of such warrant, become exchangeable for warrants to purchase such number of shares of the Company's common stock equal to 30% of the outstanding principal of the 2006 Convertible Notes divided by \$3.21 (the original purchase price of the Series A Preferred Stock) with an exercise price of \$0.02 per share. The 2006 Convertible Note Warrants are exercisable for a period of ten years from date(s) of issuance thereof, and contain provisions permitting the holders to effect a "cashless" exercise.

The 2006 Convertible Note Warrants were valued using the Black-Scholes model and the following assumptions: volatility of 100%; no dividend yield; risk-free rates of 4.96% and 5.10%, respectively, and an expected life of ten years, resulting in a value of \$74,000. The relative fair value of the 2006 Convertible Notes and 2006 Convertible Note Warrants was \$1,478,000 and \$72,000, respectively. The beneficial conversion feature was recorded as a discount to the 2006 Convertible Notes and an increase to additional paid in capital. The discount to the 2006 Convertible Notes was charged to interest expense immediately as the 2006 Convertible Notes are due on demand. The difference between the effective conversion price and the fair value of the securities into which the debt is convertible at the commitment date resulted in a beneficial conversion feature of approximately \$72,000.

Interest expense was recorded for the year ended December 31, 2006 related to the 2006 Convertible Note Warrants and the beneficial conversion feature of the 2006 Convertible Notes in the amount of \$144,000.

The 2005 and 2006 Convertible Notes including accrued interest of approximately \$215,000 converted into 2,509,866 shares of Series A preferred stock (Note 11) on July 19, 2006 at a conversion price of \$1.50 per share.

9. Lines of Credit

In 2001 and 2002, the Company entered into two credit lines to finance equipment. Borrowings under these credit lines are in the form of promissory notes, and are due 36, 42 or 48 months from the date of each advance, depending on the type of equipment being financed. The interest on the credit lines is equal to the 36- or 48-month treasury yield plus approximately 600 basis points, and are fixed at the time of each advance. Borrowings under the credit lines is collateralized by the equipment financed under each promissory note and are shown as equipment notes payable on the balance sheet of the Company. Annual interest rates on the promissory notes ranged from 8.88% to 11.38%.

In 2004, the Company agreed to modify the two credit lines ("Modification Agreements") with the Company's two equipment debt note holders ("Equipment Note Holders"). In accordance with the Modification Agreements, beginning on November 1, 2004 and October 1, 2004 and continuing for the next eight and nine months, respectively, thereafter, the Equipment Note Holders deferred the Company's obligation to make its scheduled principal payments under the promissory notes ("Deferral Period"). During the Deferral Period, the Company was only obligated to make interest payments on the outstanding principal balance under each of the promissory notes. The Deferral Period ended July 1, 2005.

In consideration for entering into the Modification Agreements, the Company issued to each of the Equipment Note Holders (i) a five-year warrant to purchase 24,910 and 26,363 shares, respectively, of the Company's common stock at an exercise price of \$3.21 per share ("Modification Warrants"), (ii) a joint first priority security interest in the Company's tangible nonfinanced assets ("Security Interest"), (iii) agreement not to pledge its security interest in any of its intellectual property ("Negative Pledge") and (iv) restructuring payments in the amount of \$10,000 and \$8,471, respectively. The Security Interest and Negative Pledge will cease upon the completion of a financing by the Company of at least \$10 million.

The Modification Warrants were valued under the Black-Scholes option pricing model using the following assumptions: volatility of 100%, no dividend yield, risk-free interest rate of 3.276% and 3.350%, respectively, and an expected life of five years. The value of the Modification Warrants, \$14,000, along with the restructuring payments, were recorded as deferred issuance costs and amortized as interest expense.

On October 18, 2005, the Company entered into amendments to the Modification Agreements reducing the Company's payment obligations through March 30, 2006. Payments under the modified amortization schedules increased with the first payment subsequent to that date. In consideration for entering into these amendments, in addition to the security interest already provided for under the Modification Agreements, the Equipment Note Holders had a joint first priority security interest in the cash, cash equivalents, investment property, and accounts of the Company. The Company also agreed not to make any payment of indebtedness without the approval of a certain Equipment Note Holder through an additional amendment dated October 27, 2005.

On December 28, 2006, the Company paid in full one of the equipment note holders and terminated the credit line with that equipment note holders by incurring \$500,000 of debt with the other equipment note holders. The terms under this arrangement were that the Company would pay off the remaining balance over the existing amortization schedule at an interest rate of 11.38% through September 1, 2007. The Company issued a five-year warrant to purchase 3,115 shares of common stock to the ongoing Equipment Note Holder (Note 13) in connection with this transaction.

The warrants were valued under the Black-Scholes option pricing model using the following assumptions: volatility of 100%; no dividend yield; risk-free interest rate of 4.59%, and an expected life of five years. The value of the warrants, \$1,000, was recorded as interest expense.

The remaining principal amount under the one remaining credit line of \$915,000 is due in 2007, after which this line will terminate.

10. Common Stock

The Company entered into agreements with certain employees, directors, consultants and advisors of the Company pursuant to which 1,307,226 shares of common stock were subject to restrictions as to the sale or transfer of the shares until the restrictions have lapsed. The restrictions were set at the discretion of the board of directors, but generally lapsed 25% after one year and then quarterly for the next twelve quarters. Under these agreements, all of shares of common stock were fully vested and no longer subject to restriction at December 31, 2006.

During 2006 and prior years the Company issued options to purchase common stock to nonemployees. The options vest over time as long as the nonemployee continues to provide services to the Company. The Company recorded compensation expense of \$100,000, \$100,000 and \$135,000 related to these options in the years ended December 31, 2006, 2005 and 2004, respectively. The Company has also granted options to purchase common stock to employees (Note 12).

11. Preferred Stock

The Series A preferred stock, Series A-1 preferred stock, Series AE-1 preferred stock, Series AE-2 preferred stock, Series AE-3 preferred stock and Series B preferred stock are collectively known as "Preferred Stock."

In April 2001 and February 2002, the Company issued 3,394,342 and 7,433,780, respectively, shares of Series A preferred stock for \$1.50 per share for net proceeds of \$5,092,000 and \$11,151,000, respectively.

In April 2001, in conjunction with the Elan Transaction (Note 5), the Company issued 1,109,418 and 1,187,500, respectively, shares of Series AE-1 and Series AE-2 preferred stock for proceeds of \$8,010,000 and \$5,000,000, respectively.

In January 2002, February 2002 and May 2003, in conjunction with a research collaboration and license agreement with diaDexus, Inc. and a strategic partnership agreement with Waters (Note 16), the Company issued 237,530, 712,589 and 426,127 shares of Series B preferred stock, respectively, for \$4.21 per share, for net proceeds of \$1,000,000, \$3,000,000 and \$639,000, respectively.

On October 28, 2004, in conjunction with the Elan Termination Agreement (Note 5), along with paying Elan \$500,000 and issuing a \$2,000,000 promissory note, the Company issued Elan 1,092,637 shares of a newly created, non-voting, class of Series AE-3 Preferred Stock. In return, Elan (i) cancelled the \$8,010,000 Development Note due from the Company, including all accrued and unpaid interest in the amount of \$1,717,000 and (ii) transferred 1,109,418 shares of its previously purchased Series AE-1 preferred stock back to the Company. The Series AE-1 preferred stock was then cancelled and retired by the Company.

On December 22, 2004, in conjunction with entering into an amendment of the research collaboration and license agreement with diaDexus, Inc., diaDexus transferred to the Company 237,530 shares of Series B preferred stock, previously purchased from the Company for \$4.21 per share.

On March 28, 2005, in exchange for \$1,000,000, Elan (i) cancelled the \$2,000,000 promissory note (Note 5) due from the Company, including all accrued and unpaid interest in the amount of \$35,000, (ii) transferred 1,433,780 shares of its previously purchased Series A preferred stock back to the Company, (iii) transferred 1,187,500 shares of its previously purchased Series AE-2 preferred stock back to the Company, and (iv) transferred 1,092,637 shares of its previously purchased Series AE-3 preferred stock back to the Company. The Series AE-2 and Series AE-3 preferred stock were then cancelled and retired by the Company.

On July 19, 2006, in conjunction with the Strategic Partnership Agreement with Philips (Note 16), the Company issued 2,475,247 shares of its Series A-1 preferred stock for \$2.02 per share, for net proceeds of \$4,999,999.

The rights associated with each class of preferred stock are as follows:

Dividends

Holders of the Series AE-2 and AE-3 were and holders of Series A, A-1, and B preferred stock are entitled to receive dividends as and when declared by the board of directors. The holders of Series AE-1 preferred stock were entitled to receive cumulative dividends at a rate of 6.75% per share,

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compounded semiannually, payable solely in shares of Series AE-1 preferred stock, from issuance date whether or not earned or declared. In any event, accruing dividends were not due without the consent of the holders of a majority of the Series AE-1 preferred stock. As of October 28, 2004, the date of the Elan Termination (Note 5), and December 31, 2003, \$2,106,000 and \$1,567,000, respectively, of dividends had been accrued on Series AE-1 preferred stock. These dividends, along with the Series AE-1 preferred stock, were cancelled upon the consummation of the Elan Termination Agreement.

Voting Rights

Holders of each share of Series A, A-1 and B preferred stock are entitled to one vote per share.

Conversion Rights

Shares of AE-2 and AE-3 preferred stock were convertible and shares of Series A, A-1, and B preferred stock are convertible, at the option of the holder, into shares of the Company's common stock on a 1-for-0.47 basis, subject to certain antidilution adjustments. All outstanding shares of preferred stock automatically convert into common stock upon the closing of a public offering of the Company's common stock involving gross proceeds to the Company of at least \$20 million and a per share price of not less than \$9.63.

Redemption Rights

At any time on or after July 31, 2008, at the written election of the holders of at least a majority of outstanding shares of Series A and Series A-1 preferred stock, voting together as a single class, redemption shall occur at the following rates, at a price equal to the original purchase price of \$1.50 and \$2.02 for the Series A and Series A-1 preferred stock, respectively, plus all accrued but unpaid dividends:

Redemption Date	Percent of Outstanding Series A and A-1 Shares to be Redeemed
July 31, 2008	33%
July 31, 2009	50%
July 31, 2010	100%

Under the terms of the Series A and Series A-1 preferred stock, the Company is required to set aside the following amounts for meeting stock redemption requirements:

2008	\$ 9,578,449
2009	4,789,225
2010	14,367,674
Total:	\$ 28,735,348

Liquidation Preference

In the event of any liquidation, dissolution or winding-up of the Company, the preferred stockholders shall be entitled, before any distribution or payment is made upon the common stock, to be paid an amount equal to the original purchase price per share, plus all declared but unpaid dividends thereon, subject to antidilution adjustments. The original purchase price per share of the Series AE-2 and Series AE-3 preferred stock were each \$4.21, and the original issue purchase price per share of the Series A, Series A-1 and Series B preferred stock were \$1.50, \$2.02 and \$4.21. Any assets remaining following the preferential distribution to the holders of preferred stock shall be available for distribution ratably among the common stock stockholders.

12. Stock-Based Compensation

In June 2001, the Company adopted the 2001 Stock Option and Incentive Plan (the "2001 Plan") that provides for the granting of stock options and other equity interests in the Company to employees, officers, directors, consultants and advisors of the Company. The exercise price for incentive stock options issued under the 2001 Plan cannot be less than the fair market value of the common stock on the date of grant, or less than 110% of the fair market value for stockholders with 10% or more ownership of the Company, if applicable, as determined by the Company's board of directors, but in no case may the exercise price be less than the statutory minimum. The stock options have terms ranging from eight to ten years. Vesting of options is set at the discretion of the board of directors, but is generally 25% after one year and then 6.25% quarterly for the next twelve quarters.

The Company amended the 2001 Plan on several occasions, which among other items, increased the number of shares of common stock available to be granted so that an aggregate of 3,738,318 shares of common stock are issuable under the 2001 Plan.

Using the Black-Scholes option pricing model, the Company has determined that the options issued in 2006 have a weighted-average fair value of \$3.96 per share, resulting in total compensation cost of \$1,526,000. Compensation cost will be recognized over the four-year service period that began January 1, 2006. For the year ended December 31, 2006, the Company recognized \$34,000 as compensation cost. The remaining \$1,492,000 compensation cost will be recognized over the next four years at the rate of \$382,000 per year.

Compensation costs recognized under SFAS No. 123R were not capitalized by the Company. Total compensation cost was \$327,000 and \$136,000 for research and development and general and administrative, respectively, for the year ended December 31, 2006. The impact of the adoption of SFAS No. 123R on the net loss, cash flows, and earnings per share was \$257,000, \$0 and \$0.03, respectively, for the year ended December 31, 2006.

The Company accounts for stock-based awards issued to non-employees in accordance with the provisions of SFAS No. 123R and EITF No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunctions with Selling, Goods of Services*, under which compensation expense is generally computed and recognized over the vesting period of the award. Total compensation expense associated with options issued to non-employees totaled approximately \$206,000, \$100,000 and \$135,000 for the years ended December 31, 2006, 2005 and 2004, respectively.

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The following table summarizes information about stock options outstanding at December 31, 2006:

	Number of Shares	Weighted Average Exercise Price Per Share
Outstanding, December 31, 2005	2,662,168	\$ 0.54
Granted	384,579	0.54
Exercised	(6,570)	0.47
Canceled	(40,086)	0.50
Outstanding, December 31, 2006	3,000,091	\$ 0.54

As of December 31, 2006, options for 1,600,051 shares at a weighted average exercise price of \$0.54 were vested and exercisable. These options have a weighted average remaining contractual term of 6.29 years. Compensation cost of approximately \$1,876,000 had not yet been recognized on nonvested awards. The weighted average period over which it is expected to be recognized is 2.8 years.

During 2006, 2005 and 2004, the Company received \$3,000, \$1,000 and \$1,000, respectively, from employees upon exercise of options. The intrinsic value of the options exercised were \$24,426, \$0, and \$500, during 2006, 2005, and 2004, respectively.

The following table summarizes information about our stock option plans at December 31, 2006:

Exercise Prices	Options Outstanding				Options Exercisable			
	Number Outstanding at December 31, 2006	Weighted-Average Remaining Contractual Life in Years	Weighted-Average Exercise Price	Aggregate Intrinsic Value of Shares Outstanding	Number Exercisable at December 31, 2006	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life in Years	
\$0.32	45,791	4.53	\$ 0.32	\$ 240,100	45,791	\$ 0.32	4.53	
\$0.54	2,954,300	7.26	0.54	14,857,433	1,554,260	0.54	6.42	
	3,000,091	7.22	\$ 0.54	\$ 15,097,533	1,600,051	\$ 0.54	6.37	

13. Warrants

In establishing and refinancing the Company's credit lines as described in Note 9, the Company issued warrants to purchase up to 151,348 shares of the Company's common stock, with an exercise price of \$3.21 per share. These warrants were issued and immediately exercisable in increments of 31,152, 24,921, 40,887, 26,363, 24,910 and 3,115 shares. The first set of warrants in the amount of 31,152 expired on June 4, 2006. The remaining warrants expire on July 15, 2007, November 4, 2007, September 28, 2009, October 28, 2009 and December 22, 2016, respectively. These warrants were exercisable immediately upon issuance and certain of them exercise automatically on a cashless basis upon the Company's initial public offering.

Additionally, in conjunction with a strategic alliance entered into with Boston University School of Medicine ("BUSM") in 2002, the Company issued warrants to purchase up to 23,364 shares of the

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Company's common stock, with an exercise price of \$3.21 per share. These warrants, which were immediately exercisable and automatically exercise on a cashless basis upon the Company's initial public offering, expire on April 30, 2012.

The Company also issued warrants to an academic institution to purchase 23,364 shares of common stock with an exercise price of \$3.21 per share. These warrants, which were immediately exercisable, expired on September 1, 2006.

The following is a summary of outstanding warrants as of December 31, 2006:

Date Acquired	Expiration Date	Price	Exercise Warrants
4/30/2002	4/30/2012	\$ 3.21	23,364
7/15/2002	7/15/2007	\$ 3.21	24,921
11/4/2002	11/4/2007	\$ 3.21	40,887
9/28/2004	9/28/2009	\$ 3.21	26,363
10/28/2004	10/28/2009	\$ 3.21	24,910
10/28/2004	7/28/2015	\$ 0.02	700,932
3/28/2005	7/28/2015	\$ 0.02	155,763
9/8/2005	9/8/2015	\$ 0.02	46,726
9/28/2005	9/28/2015	\$ 0.02	46,726
11/14/2005	11/14/2015	\$ 0.02	46,726
12/15/2005	12/15/2015	\$ 0.02	46,726
3/10/2006	3/10/2016	\$ 0.02	98,126
7/10/2006	7/10/2016	\$ 0.02	46,726
12/22/2006	12/22/2016	\$ 3.21	3,115
Total warrants outstanding			1,332,011

14. Commitments and Contingencies

Operating and Capital Leases

In April 2001, the Company entered into a four-year noncancelable operating lease for its laboratory and office facilities. Rent expense under this operating lease totaled \$103,000 and \$247,000 for the years ended December 31, 2005 and 2004, respectively. The lease expired in May 2005.

Additionally, in August 2002, in order to expand its laboratory facilities, the Company entered into a 30-month noncancelable operating lease for an additional facility. The commencement date of this lease was January 1, 2003. Rent expense under this operating lease totaled \$68,000 and \$136,000 for the years ended December 31, 2005 and 2004, respectively. The Company terminated the lease in June 2005.

In May 2005, the Company entered into a 38-month noncancelable operating lease for its laboratory and office facilities. Rent expense under this operating lease totaled \$423,000 and \$282,000 for the years ended December 31, 2006 and 2005, respectively.

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In January 2006, the Company entered into a two-year operating lease for laboratory equipment. Payments under this operating lease totaled \$34,000 for the year ended December 31, 2006.

In June 2006, the Company entered into a three-year operating lease for computer equipment. Payments under this operating lease totaled \$8,000 for the year ended December 31, 2006.

Additionally, in August 2006, the Company entered into a four-year operating lease for computer equipment. Payments under this operating lease totaled \$3,000 for the year ended December 31, 2006.

Rent expense for operating leases for the years ended December 31, 2006, 2005 and 2004 totaled \$468,000, \$350,000 and \$383,000, respectively.

In December 2004, the Company entered into two separate three-year capital leases for laboratory equipment from the same vendor. Payments under these capital leases totaled \$115,000, \$105,000 and \$34,000 for the years ending December 31, 2006, 2005 and 2004, respectively.

In August 2005, the Company entered into a four-year noncancelable capital lease for computer equipment. Payments under this capital lease totaled \$16,000 and \$7,000 of the years ending December 31, 2006 and 2005, respectively.

In December 2005, the Company entered into a two-year capital lease for laboratory equipment. Payments under this capital lease totaled \$209,000 and \$42,000 for the years ending December 31, 2006 and 2005.

Total payments under capital leases for the years ended December 31, 2006, 2005 and 2004 totaled \$340,000, \$154,000 and \$243,000, respectively.

Future minimum payments under the Company's operating leases together with the present value of net minimum payments of equipment under capital lease at December 31, 2006, are as follows:

	Lease Obligations	
	Operating	Capital
	(in thousands)	
2007	\$ 494	\$ 340
2008	240	68
2009	25	11
2010	7	
	\$ 766	419
Less: Amount representing interest		24
Present value of net minimum lease payments		395
Less: Current portion		318
Long-term portion		\$ 77

Other Commitments

The Company enters into indemnification provisions under agreements with other companies in the ordinary course of business, typically with business partners, contractors, clinical sites and

customers. Under these provisions, the Company generally indemnifies and holds harmless the indemnified party for losses suffered or incurred by the indemnified party as a result of its activities. These indemnification provisions generally survive termination of the underlying agreement. The maximum potential amount of future payments that the Company could be required to make under these indemnification provisions is unlimited. However, to date, the Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. As a result, the estimated loss associated with these agreements is minimal. Accordingly, the Company has no liabilities recorded for these agreements as of December 31, 2006.

15. Licensing Agreements

In January 2004, the Company renewed and amended its three-year Strategic Relationship Agreement with the Netherlands Organization for Applied Scientific Research with a principal place of business at Delft, the Netherlands ("TNO"). Under the agreement, TNO has agreed to license certain technologies and to provide contract services to the Company over a three year period. Additionally, the agreement provides for the Company to make payments to TNO for the granting of such licenses and minimum service commitment of \$2,200,000 over its term. Service contract fees, which have been recorded as research and development expenses, approximated \$807,000, \$828,000 and \$865,000 for the years ended December 31, 2006, 2005 and 2004, respectively. In December 2006, the Company extended the agreement with TNO for one year, with a commitment of \$750,000, along with a minimum of \$50,000 annual royalties.

Technology access and licensing fees incurred by the Company for the years ended December 31, 2006, 2005 and 2004 approximated \$174,000, \$195,000 and \$175,000, respectively. Under this agreement, the Company is required to make minimum royalty payments of \$50,000 annually until 2009. These fees were recorded as research and development expenses.

16. Strategic Alliances and Research Development Agreements

The following represents significant strategic alliances and research and development collaboration not already fully disclosed in the financials statements and accompanying notes.

Micromass, UK Ltd.

In February 2002, the Company entered into a strategic partnership with Micromass, UK Ltd. ("MMUK"), a subsidiary of Waters. Under the terms of the agreement, the Company committed to purchase laboratory equipment over a three-year period in exchange for an investment in the Company.

Upon executing the agreement, the Company received a \$3,000,000 upfront equity payment from Waters and issued 712,589 shares of Series B preferred stock. The difference between (i) the proceeds received and (ii) the then-deemed fair market value of the stock purchase by Waters, which approximated \$1,931,000, was recorded as a deferred equipment credit. The equipment credits are being applied to laboratory equipment purchases on a pro rata basis. In connection with this agreement, the Company also received a \$2,000,000 loan from MMUK, in the form of a convertible promissory note (the "MMUK note").

In May 2003, the Company executed an Exclusive Patent Sublicense Agreement with Waters Investments Limited ("Waters Investments"), a subsidiary of Waters. Under the terms of the agreement, Waters Investments agreed to pay the Company for the sublicensing of certain intellectual property rights owned by the Company. The Company received payment through the execution of a noncash transaction in which the balance of the MMUK note due, including accrued interest exchanged for (i) a license to certain of the Company's technology and (ii) 426,127 shares of the Company's Series B preferred stock at \$4.21 per share, resulting in an additional deferred equipment credit of \$1,155,000.

In conjunction with the issuance of the Series B preferred stock to Waters Investments, the Company agreed to purchase an additional \$1,308,000 and \$1,750,000 of laboratory equipment from Waters prior to April 1, 2004 and 2005, respectively (see Note 4).

Other Major Pharmaceutical Company

In December 2003, the Company entered into a Research Collaboration, Option and License Agreement with a major pharmaceutical company to apply systems biology to drug discovery and development in the field of metabolic diseases. Under the terms of the agreement, the other party to the agreement paid the Company certain research fees over a two-year period. In addition to the upfront fee and funded research work, the Company is also eligible to receive additional payments related to (i) license fees for other therapeutic areas outside the field, (ii) license fees for commercial diagnostics, (iii) milestone payments for targets, and (iv) milestone payments and a license agreement for therapeutic candidates.

AstraZeneca

In November 2003, the Company entered into a research agreement with AstraZeneca AB ("AZ"). The research agreement focuses on the identification of biomarkers of drug-induced liver toxicity. The project consists of two phases, bioanalysis and data integration and identification of candidate biomarkers. Under the terms of the agreement, AZ committed to pay certain fees for research work under the agreement, which was completed in 2004.

In June 2005, the Company entered into an unrelated research agreement with AZ. Under the terms of the agreement, AZ committed to pay certain fees for research work. Additionally, AZ had certain milestone payment obligations in the event it pursues development of any of the biomarkers discovered. The research commenced in 2005 and concluded in 2006. Due to limited availability of suitable samples the study size was reduced and the Company issued a credit in the amount of \$275,000 to AZ towards a future project. This is recorded as a customer deposit on the balance sheet as of December 31, 2006.

Boehringer Ingelheim

In May 2005, the Company entered into a master services agreement with Boehringer Ingelheim Pharmaceuticals, Inc. ("BI"). The goals of the assignment were to identify candidate biomarker(s) of certain drug-induced organ toxicity. The project consisted of two phases involving proteomics and

metabolomics. Under the terms of the agreement, BI committed to pay certain fees for research work related under the agreement. Both phases commenced in 2005 and were completed in 2006.

The Global Alliance for TB Drug Development

In January 2006, the Company entered into a master services agreement with The Global Alliance for TB Drug Development ("TBA"). The objective of the project work plan is to discover molecular biomarkers of tuberculosis drug efficacy. Under the terms of the agreement, TBA committed to pay certain research fees. The first phase of the project was initiated and concluded in 2006, the second phase was initiated in 2007 and is currently ongoing.

Mitsubishi Pharma Corporation

In March, 2006, the Company entered into a master services agreement with Mitsubishi Pharma Corporation ("Mitsubishi"). The Company was contracted to study and compare the molecular effects on skeletal muscle of two drugs, one of which is fenofibrate and to discover biomarkers of those effects. Under the terms of the agreement, Mitsubishi committed to pay certain research fees. The project was not yet completed as of December 31, 2006.

Royal Philips Electronics

In July 2006, the Company formed an alliance with Royal Philips Electronics ("Philips") in the field of systems biology. Under the partnership agreement the Company will collaborate with Philips to develop the next generation of molecular healthcare products for application in areas such as molecular imaging and point-of-care diagnostics. Key to the alliance is the Company's proprietary systems profiling technologies that identify biomarker sets associated with disease stage, progression and treatment. The Company has granted Philips preferential access to certain of its proprietary technologies and services. As part of the alliance, Philips paid the Company \$5 million for 2,475,247 shares of its Series A-1 preferred stock. In 2007, Philips joined the HRP initiative described below.

Liver Toxicity Based Study Program

In 2006, the Company began the Liver Toxicity Biomarker Study Program ("LTBS") with the FDA's Division of Systems Toxicology, National Center for Toxicological Research. The research is conducted under a Cooperative Research and Development Agreement ("CRADA") with the FDA as described in Note 18. The goal of the LTBS program is to advance the understanding of drug-induced liver toxicity. Seven participation agreements were executed with several sponsors through March 2007. Each contract had fees totalling \$350,000. Participating companies have certain rights to the data and intellectual property originating from this research.

HRP initiative

In July 2006, the Company executed the first participation agreement under the HRP initiative. This program is a joint research and development effort to advance the understanding, recognition and management of high-risk plaque for the benefit of all stakeholders in the healthcare system. The first

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agreement was executed with Merck & Co., Inc. In November 2006, the second participation agreement was executed with AZ. Both these agreements have total fees of \$5 million each. The third agreement was executed in December 2006 with Philips. Cash compensation under this particular agreement will be \$3.2 million with the remaining \$1.8 million to be provided in equipment loans necessary for imaging activities. The approval is set through a Joint Steering Committee and Scientific Programming Board which meet regularly.

17. 401(k) Savings Plan

In October 2001, the Company established a defined contribution savings plan under Section 401(k) of the Internal Revenue Code covering all of its employees. Employees may make contributions by withholding a percentage of their salary. The Company has not made any matching contributions into the plan through December 31, 2006.

18. Subsequent Events

Division of Systems Toxicology, National Center for Toxicological Research

In February 2007, the Company executed a CRADA with the National Center for Toxicological Research, a division of the Food and Drug Administration. This CRADA was the agreement necessary to move forward with the LTBS initiative formed in 2006.

Line of Credit

In March 2007, the Company drew \$506,000 under its credit line with its Equipment Note Holder. Approximately \$600,000 is available under the credit line.

Series C Preferred Stock

In May 2007, the Company received approximately \$5.0 million from the sale of 1,369,863 shares of Series C preferred stock at a price of \$3.65 per share. Shares of Series C preferred stock are convertible, at the option of the holder, into shares of the Company's common stock on a 1-for-1 basis, subject to certain anti-dilution adjustments. At any time after July 31, 2008, at the written election of the holders of at least a majority of the Company's outstanding shares of Series A, Series A-1 and Series C preferred stock, voting together as a single class, redemption shall occur at the following rates, at a price equal to \$3.65, plus all accrued but unpaid dividends:

Redemption Date	Percent of Outstanding Series C Shares to be Redeemed
July 31, 2008	33%
July 31, 2009	50%
July 31, 2010	100%

Holders of each share of Series C preferred stock are entitled to one vote per share. Holders of the Series C preferred stock are entitled to receive dividends if, as and when declared by the board of

directors. In the event of any liquidation, dissolution or winding-up of the Company, the Series C preferred stockholders shall be entitled, before any distribution or payment is made upon the common stock, to be paid an amount equal to the original purchase price per share, plus all declared but unpaid dividends thereon, subject to antidilution.

Common Stock

In May 2007, the Company filed a Certificate of Amendment that increased the number of authorized shares of common stock to 100,000,000 from 50,000,000.

Investor Agreement

On September 30, 2007, we entered into an agreement with our stockholders affiliated with Flagship Ventures and with our stockholders Gilde Europe Food & Agribusiness Fund, B.V. and Stelios Papadopoulos. Pursuant to this agreement, these stockholders agreed to provide us with an aggregate of up to \$3 million to be used for our working capital needs through March 31, 2008. Any funds provided to us under this agreement will be evidenced by a series of promissory notes issued to these stockholders in the principal amounts requested by us, and will be due on June 30, 2008 and, if not repaid on that date, upon demand. Any such notes will be issued on current market terms. We plan to use a portion of the net proceeds from this offering to repay any amounts loaned by our stockholders under this agreement and the corresponding promissory notes.

19. Stock Split

On October 31, 2007, the Company filed a Certificate of Amendment that effected a 1-for-2.14 reverse split of the Company's common stock and reduced the authorized shares of common stock to 50,000,000 from 100,000,000. All references to shares in the financial statements and the accompanying notes, including but not limited to the number of shares and per share amounts, unless otherwise noted, have been adjusted to reflect the stock split retroactively. Previously awarded options and warrants to purchase shares of the Company's common stock and the shares of common stock issuable upon the conversion of the redeemable convertible preferred stock have also been retroactively adjusted to reflect the stock split.

BG MEDICINE, INC. AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

	December 31, 2006	September 30, 2007	September 30, 2007 (Pro Forma)
		(unaudited)	(unaudited)
(in thousands, except share and per share data)			
Assets			
Current assets			
Cash and cash equivalents	\$ 1,010	\$ 622	\$ 622
Restricted cash	1,466	2,050	2,050
Restricted short-term investments		3,215	3,215
Trade receivables	2,060		
Prepaid expenses and other current assets	289	410	410
	<u>4,825</u>	<u>6,297</u>	<u>6,297</u>
Total current assets	4,825	6,297	6,297
Property and equipment, net	1,274	1,740	1,740
Deposits and other assets	70	2,131	2,131
	<u>6,169</u>	<u>10,168</u>	<u>10,168</u>
Total assets	\$ 6,169	\$ 10,168	\$ 10,168
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit			
Liabilities			
Current liabilities			
Accounts payable	\$ 412	\$ 1,655	\$ 1,655
Accrued expenses	685	2,805	2,805
Customer deposits	275	275	275
Deferred rent, current portion	53	48	48
Deferred revenue, current portion	6,097	6,886	6,886
Capital lease obligations, current portion	318	304	304
Equipment notes payable, current portion	915	220	220
	<u>8,755</u>	<u>12,193</u>	<u>12,193</u>
Total current liabilities	8,755	12,193	12,193
Deferred rent, net of current portion	33		
Deferred revenue, net of current portion	1,053		
Capital lease obligations, net of current portion	77	107	107
Equipment notes payable, net of current portion		763	763
	<u>9,918</u>	<u>13,063</u>	<u>13,063</u>
Total liabilities	9,918	13,063	13,063

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Redeemable convertible preferred stock:

Series A redeemable preferred stock; \$.001 par value, 16,017,067 shares authorized; 15,823,566 shares issued and outstanding at December 31, 2006 and September 30, 2007, respectively, at redemption value; liquidation preference of \$23,735 at December 31, 2006 and September 30, 2007; no shares outstanding at September 30, 2007, pro forma	\$	23,735	\$	23,735	\$
Series A-1 redeemable exchangeable preferred stock; \$.001 par value, 2,475,247 shares authorized, issued and outstanding at December 31, 2006, and September 30, 2007, at redemption value; liquidation preference of \$5,000 at December 31, 2006 and September 30, 2007; no shares outstanding at September 30, 2007, pro forma		5,000		5,000	
Series C redeemable preferred stock; \$.001 par value, 1,369,863 shares authorized; issued and outstanding at September 30, 2007, at redemption value, liquidation preference of \$5,000 at September 30, 2007; no shares outstanding at September 30, 2007, pro forma				2,135	
Total redeemable convertible preferred stock		28,735		30,870	
Stockholders' deficit					
Series B convertible preferred stock; \$.001 par value; 2,000,000 shares authorized; 1,138,716 shares issued and outstanding at December 31, 2006, and September 30, 2007; liquidation preference of \$1,708 at December 31, 2006 and September 30, 2007, no shares outstanding at September 30, 2007, pro forma		1,708		1,708	
Common stock; \$.001 par value; 50,000,000 and 100,000,000 shares authorized as of December 31, 2006 and September 30, 2007, respectively, 4,701,089 and 4,760,873 shares issued and outstanding at December 31, 2006 and September 30, 2007 respectively, 14,545,233 shares issued and outstanding at September 30, 2007, pro forma		5		5	15
Unrealized gain on investments				10	10
Additional paid-in capital		1,774		6,432	39,000
Accumulated deficit		(35,971)		(41,920)	(41,920)
Total stockholders' deficit		(32,484)		(33,765)	(2,895)
Total redeemable convertible preferred stock and stockholders' deficit		(3,749)		(2,895)	(2,895)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$	6,169	\$	10,168	\$ 10,168

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

BG MEDICINE, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS

	Nine Months Ended September 30,	
	2007	2006
	(unaudited)	(unaudited)
	(in thousands, except share and per share data)	
Revenue	\$ 6,589	\$ 3,341
Operating Expenses		
Research and development expenses	9,417	5,816
General and administrative expenses	3,033	1,732
Gain on sale of property and equipment	(119)	
Total operating expenses	12,331	7,548
Loss from operations	(5,742)	(4,207)
Interest income	101	4
Interest expense	(105)	(511)
Net loss	(5,746)	(4,714)
Amortization of beneficial conversion feature of Series C preferred stock	(203)	
Net loss attributable to common stockholders	\$ (5,949)	\$ (4,714)
Basic and diluted loss per share	\$ (1.26)	\$ (1.00)
Basic and diluted weighted average shares outstanding	4,720,836	4,694,519

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

BG MEDICINE, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Nine Months Ended September 30,	
	2007	2006
	(unaudited)	(unaudited)
	(in thousands)	
Cash flows from operating activities		
Net loss	\$ (5,746)	\$ (4,714)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation and amortization	465	507
Stock-based compensation	1,518	180
Non-cash interest expense	48	326
Gain on sale of property and equipment	(119)	
Changes in operating assets and liabilities		
Restricted cash	(584)	
Trade receivables	2,060	49
Prepaid expenses and other current assets	(121)	63
Deposits and other assets	(2,061)	(6)
Accounts payable and accrued expenses	3,363	112
Deferred revenue	(264)	1,289
Deferred rent	(38)	(21)
	<u>(1,479)</u>	<u>(2,215)</u>
Net cash flows used in operating activities		
Cash flows from investing activities		
Purchases of property and equipment	(677)	(83)
Proceeds from the sale of property and equipment	229	
Purchases of short-term investments, net	(3,205)	
	<u>(3,653)</u>	<u>(83)</u>
Net cash flows used in investing activities		
Cash flows from financing activities		
Proceeds from issuance of Series A-1 redeemable preferred stock		5,000
Proceeds from issuance of Series C redeemable preferred stock	5,000	
Proceeds from issuance of convertible promissory notes		1,550
Proceeds from the issuance of equipment notes payable	1,036	250
Payments on equipment notes payable	(968)	(886)
Payments on short-term notes payable		(252)
Principal payments on capital lease obligations	(347)	(218)
Proceeds from issuance of common stock	23	
	<u>4,744</u>	<u>5,444</u>
Net cash flows provided by financing activities		
Net (decrease) increase in cash and cash equivalents	(388)	3,146
Cash and cash equivalents, beginning of period	1,010	1,148
	<u>\$ 622</u>	<u>\$ 4,294</u>
Cash and cash equivalents, end of period		

Nine Months Ended
September 30,

Supplemental disclosure of cash flow information

Cash paid for interest on equipment notes payable	\$	105	\$	185
Amortization of beneficial conversion feature of Series C preferred stock		203		
Equipment acquired under capital lease		363		
Issuance of warrants with equipment notes		48		
Conversion of convertible promissory notes to Series A preferred stock, including accrued interest				3,764
Beneficial conversion feature of convertible promissory notes				72
Issuance of warrants with convertible promissory notes				74

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

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BG MEDICINE, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the Nine Months Ended September 30, 2007 and 2006

1. Description of Business

BG Medicine, Inc. ("BG Medicine" or the "Company") was incorporated and formed under the laws of the State of Delaware on February 9, 2000 as Beyond Genomics, Inc. The Company changed its name to BG Medicine, Inc. in 2004. The Company is a life sciences company focused on the discovery, development and commercialization of novel molecular diagnostics based on biomarkers to improve patient outcomes and reduce health care costs. The Company's molecular diagnostic tests are designed to predict a patient's response to a drug therapy, determine the potential toxicity of therapeutic agents, identify patients who have or are likely to develop a specific disease, predict a patient's prognosis once a disease has been diagnosed and monitor a patient's disease progression or drug response. The Company's platform is the discovery engine that enables us to identify new biomarkers by integrating and automating the measurement, analysis, characterization and interpretation of proteins and small non-protein biological molecules, or metabolites, collected from bodily fluids. The Company has collaborations and initiatives with major pharmaceutical companies, the United States Food and Drug Administration, or FDA, and other health care organizations.

2. Significant Accounting Policies

Basis of Presentation

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America. These consolidated financial statements should be read in conjunction with the annual consolidated financial statements and the notes thereto, included elsewhere in this prospectus.

The accompanying consolidated balance sheet as of September 30, 2007 and the consolidated statements of operations and cash flows for the nine months ended September 30, 2007 and 2006 are unaudited. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Company's financial position at September 30, 2007 and results of operations and cash flows for the nine months ended September 30, 2007 and 2006. The financial data and other information disclosed in these notes to the financial statements related to the nine-month periods are unaudited. The results of the nine months ended September 30, 2007 are not necessarily indicative of the results to be expected for the year ending December 31, 2007 or for any other interim period or for any other future year.

The Company had unrestricted cash and cash equivalents of approximately \$622,000 and \$1,010,000, at September 30, 2007 and December 31, 2006, respectively. The Company believes that the unrestricted cash and cash equivalents on hand at December 31, 2006, in combination with the availability of restricted cash under the HRP initiative, cash expected to be generated from operations in 2007 and funding available under the agreement with the Company's current investors described in Note 9, will be sufficient to meet the Company's working capital, debt service and capital expenditure requirements through at least December 31, 2007.

Unaudited Pro Forma Presentation

Upon the closing of the Company's initial public offering of common stock, all of the outstanding shares of Series A, A-1, B and C preferred stock will automatically convert to 9,723,069 shares of the

Company's common stock and warrants to purchase 89,161 shares of common stock will convert into 61,291 shares of common stock pursuant to the net exercise provisions. The unaudited pro forma presentation of the balance sheet has been prepared assuming the conversion of all shares of preferred stock into 9,723,069 shares of common stock and the net exercise of these warrants into 61,291 shares of common stock as of September 30, 2007.

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported periods. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments which mature within three months from date of purchase to be cash equivalents. Such investments are carried at cost, which approximates fair value.

Restricted Cash

Restricted cash of approximately \$2,050,000 and \$1,466,000 at September 30, 2007 and December 31, 2006, respectively, consisted of cash received under the High Risk Plaque Initiative Program. This cash is to be used solely to fund the efforts under this strategic relationship. The Company invests the excess restricted cash in short-term marketable securities, primarily high-grade corporate notes and bonds.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, which include cash and cash equivalents, short-term investments, accounts receivable, accounts payable, accrued expenses, capital lease obligations, notes payable and promissory notes, approximate their fair values at September 30, 2007.

Restricted Short-Term Investments

The Company invests excess cash balances in short-term marketable securities, primarily high-grade corporate notes and bonds. These investments are considered available-for-sale. Gains or losses on the sale of investments classified as available-for-sale, if any, are recognized on the specific identification method. Unrealized gains or losses are treated as a separate component of stockholders' equity until the security is sold or until a decline in fair market value is determined to be other than temporary.

The Company invests the excess restricted cash in short-term marketable securities, primarily high-grade corporate notes and bonds. These investments are considered restricted and are to be used solely to fund the efforts under the HRP Initiative Program. Restricted short-term investments amounted to \$3,215,000 and \$0 at September 30, 2007 and December 31, 2006, respectively.

3. Common Stock

In May 2007, the Company filed a Certificate of Amendment that increased the number of authorized shares of common stock to 100,000,000 from 50,000,000.

4. Preferred Stock

In May 2007, the Company received approximately \$5.0 million from the sale of 1,369,863 shares of Series C preferred stock at a price of \$3.65 per share. Shares of Series C preferred stock are convertible, at the option of the holder, into shares of the Company's common stock on a 1-for-0.47 basis, subject to certain anti-dilution adjustments. At any time after July 31, 2008, at the written election of the holders of at least a majority of the Company's outstanding shares of Series A, Series A-1 and Series C preferred stock, voting together as a single class, redemption shall occur at the following rates, at a price equal to \$3.65, plus all accrued but unpaid dividends:

Redemption Date	Percent of Outstanding Series C Shares to be Redeemed
July 31, 2008	33%
July 31, 2009	50%
July 31, 2010	100%

Holders of each share of Series C preferred stock are entitled to one vote per share. Holders of the Series C preferred stock are entitled to receive dividends if, as and when declared by the board of directors. In the event of any liquidation, dissolution or winding-up of the Company, the Series C preferred stockholders shall be entitled, before any distribution or payment is made upon the common stock and *pari passu* with the holders of Series A, A-1 and B preferred stockholders, to be paid an amount equal to the original purchase price per share, plus all declared but unpaid dividends thereon, subject to antidilution.

The Company accounts for beneficial conversion features under Emerging Issues Task Force No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios* and EITF Issue No. 00-27, *Application of Issue 98-5 to Certain Convertible Instruments*. At the time of the issuance of Series C redeemable convertible preferred stock, the common stock into which the redeemable convertible preferred stock is convertible had a fair value greater than the effective conversion price of the redeemable convertible preferred stock. The difference between the effective conversion price and the fair value of the common shares into which the preferred stock was convertible at the commitment date resulted in a beneficial conversion feature of approximately \$3,068,000. The beneficial conversion feature was recorded as a decrease to the convertible preferred stock and an increase to additional paid in capital. The amortization of the beneficial conversion was computed using the effective yield method and was recorded as a dividend to preferred stock of \$203,000.

5. Stock-Based Compensation

The Company accounts for stock-based awards issued to non-employees in accordance with the provisions of SFAS No. 123R and EITF No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, under which compensation expense is generally computed and recognized over the vesting period of the award. Total

compensation expense associated with options issued totaled \$1,518,000 and \$180,000 for the nine months ended September 30, 2007 and September 30, 2006, respectively.

The weighted average grant-date fair value for options granted during the nine months ended September 30, 2007 and 2006 were \$8.28 and \$2.63 per share, respectively. There were 346,722 and 48,231 stock options issued during the nine months ended September 30, 2007 and 2006, respectively. The fair value of options at date of grant was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions:

	Nine Months Ended September 30,	
	2007	2006
(in thousands)		
Risk-free interest rate	4.47-5.06%	4.71%
Expected dividend yield	0%	0%
Expected life	5.25-6.25 years	6.25 years
Expected volatility	63%-65%	68-70%

The following table summarizes information about stock options outstanding at September 30, 2007:

	Number of Shares	Weighted Average Exercise Price Per Share
Outstanding, December 31, 2006	3,000,091	\$ 0.54
Granted	346,722	8.27
Exercised	(43,981)	0.54
Canceled	(180,501)	0.54
Outstanding, September 30, 2007	3,122,331	\$ 1.39

As of September 30, 2007, options for 1,971,819 shares at a weighted average exercise price of \$0.53 were vested and exercisable. These options have a weighted average remaining contractual term of 5.70 years. Compensation cost of approximately \$4,173,130 had not yet been recognized on nonvested awards, and the weighted average period over which it is expected to be recognized is 3.33 years.

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The following table summarizes information about our stock option plans at September 30, 2007:

Exercise Prices	Options Outstanding				Options Exercisable			
	Number Outstanding at September 30, 2007	Weighted-Average Remaining Contractual Life in Years	Weighted-Average Exercise Price	Aggregate Intrinsic Value of Shares Outstanding	Number Exercisable at September 30, 2007	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life in Years	Aggregate Intrinsic Value of Shares Exercisable
\$0.32	45,791	3.78	\$ 0.32	\$ 641,074	45,791	\$ 0.32	3.78	\$ 641,074
\$0.54	2,750,844	6.38	\$ 0.54	\$ 37,906,630	1,926,028	\$ 0.54	5.75	\$ 27,850,365
\$8.77	325,696	9.41	\$ 8.77	\$ 1,807,613		\$ 8.77		
	3,122,331	6.66	\$ 1.39	\$ 40,355,317	1,971,819	\$ 0.53	5.70	\$ 28,491,439

Income Taxes

The Company uses the liability method of accounting for income taxes. Under the liability method, deferred tax assets and liabilities reflect the impact of temporary differences between amounts of assets and liabilities for financial reporting purposes and such amounts as measured under enacted tax laws. A valuation allowance is required to offset any net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax asset will not be realized.

Net Loss per Common Share

Basic loss per common share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period. Except where the result would be anti-dilutive to income before continuing operations, diluted net loss per common share is calculated by dividing net loss by the sum of the weighted average number of common shares plus common stock equivalents, if applicable. Options and warrants to purchase common stock and preferred stock issued by the Company are considered anti-dilutive and are not used in the calculation of net loss per common share.

The Company calculates net loss per share in accordance with SFAS No. 128, *Earnings Per Share*, as clarified by EITF Issue No. 03-6, *Participating Securities and the Two-Class Method Under FASB Statement No. 128, Earnings Per Share*. EITF Issue No. 03-6 clarifies the use of the "two-class" method of calculating earnings per share as originally prescribed in SFAS No. 128. Effective for periods beginning after September 30, 2004, EITF Issue No. 03-6 provides guidance on how to determine whether a security should be considered a "participating security" for purposes of computing earnings per share and how earnings should be allocated to a participating security when using the two-class method for computing basic earnings per share. The Company has determined that its redeemable convertible preferred stock represents a participating security and therefore has applied the provisions of EITF Issue No. 03-6.

Under the two-class method, basic net loss per share is computed by dividing the net loss applicable to common stockholders by the weighted-average number of common shares outstanding for the fiscal period. Diluted net loss per share is computed using the more dilutive of (a) the two-class method or (b) the if-converted method. The Company has allocated net income first to preferred stockholders equal to the accretion of a discount and dividends on the outstanding preferred stock and then to preferred and common stockholders based on ownership interests. Net losses are not allocated to preferred stockholders. Diluted net loss per share is the same as basic net loss per share as losses have been allocated to the common stockholders in all periods presented.

6. Lines of Credit

In March, June and September 2007, the Company drew funds under a line of credit with its Equipment Note Holder in the amount of \$1,036,000. This line of credit is available up to \$1.1 million until the end of October 2007. The remaining available balance of \$63,000 expired unused. The Company issued warrants to the equipment note holder to purchase 6,453 shares of common stock, with an exercise price of \$3.21 per share. These warrants will expire on March 23, 2017, June 22, 2017 and September 24, 2017, respectively. The aggregate value of these warrants was \$48,000.

The following is a summary of net minimum payments due under the line of credit at September 30, 2007:

	(in thousands)
Total debt	\$ 983
Less: Current portion	(220)
	<u>763</u>
Long-term portion	\$ 763

7. Warrants

The following is a summary of outstanding warrants as of September 30, 2007:

Date Issued	Exercise Price	Warrants
Total warrants outstanding December 31, 2006		1,332,011
Issued	\$ 3.21	6,453
Exercised	\$ 3.21	(24,921)
		<u>1,313,543</u>
Total warrants outstanding September 30, 2007		1,313,543

8. Commitments and Contingencies

Capital Leases

In February 2007, the Company entered into a two year capital lease for laboratory equipment. In July 2007, the Company entered into a one year capital lease for computer hardware. Principal payments under these capital leases totaled \$120,647 for the nine months ended September 30, 2007.

9. Investor Agreement

On September 30, 2007, we entered into an agreement with our stockholders affiliated with Flagship Ventures and with our stockholders Gilde Europe Food & Agribusiness Fund, B.V. and Stelios Papadopoulos. Pursuant to this agreement, these stockholders agreed to provide us with an aggregate of up to \$3 million to be used for our working capital needs through March 31, 2008. Any funds provided to us under this agreement will be evidenced by a series of promissory notes issued to these stockholders in the principal amounts requested by us, and will be due on June 30, 2008 and, if not repaid on that date, upon demand. Any such notes will be issued on current market terms. We plan to use a portion of the net proceeds from this offering to repay any amounts loaned by our stockholders under this agreement and the corresponding promissory notes.

10. Stock Split

On October 31, 2007, the Company filed a Certificate of Amendment that effected a 1-for-2.14 reverse split of the Company's common stock and reduced the authorized shares of common stock to 50,000,000 from 100,000,000. All references to shares in the financial statements and the accompanying notes, including but not limited to the number of shares and per share amounts, unless otherwise noted, have been adjusted to reflect the stock split retroactively. Previously awarded options and warrants to purchase shares of the Company's common stock and the shares of common stock issuable upon the conversion of the redeemable convertible preferred stock have also been retroactively adjusted to reflect the stock split.

11. 2007 Employee, Director and Consultant Equity Incentive Plan

The board of directors and its stockholders have approved the 2007 Employee, Director and Consultant Equity Incentive Plan, which will become effective upon completion of its initial public offering. Under this plan, the board of directors may grant incentive stock options, nonqualified stock options, restricted and unrestricted stock awards and other stock-based awards. There will be 794,392 shares of our common stock authorized for issuance under the 2007 Plan. In addition, any shares of common stock that are presently subject to outstanding options under the 2001 Stock Plan but which are unissued on or after the date that the 2007 Stock Plan is adopted upon the cancellation, surrender or termination of such options, shall be added to the shares of common stock authorized under the 2007 plan to be available for future issuance; provided, however, that no more than 3,122,331 shares of our common stock, the number of options outstanding under our 2001 Stock Plan upon stockholder approval of the 2007 Stock Plan, shall be added to the 2007 Stock Plan pursuant to this provision.

12. Bridge Loan

On November 9, 2007, the Company entered into a senior secured bridge loan with Silicon Valley Bank to support general working capital and operations. The Company drew down an initial tranche of \$2,000,000 on November 9, 2007 and may draw down a second tranche of \$1,000,000 on or after February 1, 2008, subject to Silicon Valley Bank's approval. Both tranches will bear a fixed interest rate of 10.25% with a repayment date on the earliest of the closing of our initial public offering, our next equity or debt financing or March 31, 2008. The bridge loan is secured by all of the Company's assets, including its intellectual property, but excluding its equipment. In connection with the Company's initial draw down under the bridge loan, it issued a warrant to purchase 25,608 shares of its common stock at an exercise price of \$7.81 per share; this warrant will be converted into a warrant to purchase the Company's preferred stock at the applicable preferred stock price in the event it completes a preferred stock equity financing prior to the closing of its initial public offering. The Company will be required to issue an additional warrant to Silicon Valley Bank in the event it draws down the second tranche for a number of shares equal to 10% of the second tranche loan amount divided by the exercise price then in effect for the initial warrant. The second warrant will be exercisable for the same class of securities as the initial warrant and will be exercisable for the same exercise price. Each warrant will be exercisable for a period of 10 years from the date of issuance. In connection with entering into this bridge loan, the security interest held by the Company's Equipment Note Holder was amended so that it no longer covers all of the Company's assets, and now covers only the Company's equipment.

13. Convertible Notes

On December 27, 2007 the Company entered into an agreement to issue \$2.0 million aggregate principal amount in convertible notes to entities affiliated with Flagship Ventures, with which its director, Noubar Afeyan, is affiliated, and to Gilde Europe Food & Agribusiness Fund B.V., with which its director, Pieter van der Meer is affiliated. Of the total amount, \$1.4 million will be issued to Flagship and \$600,000 will be issued to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of the Company's existing lenders. Interest on the notes accrues at the rate of 10% per year. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically convert upon the closing of this offering into that number of shares of the Company's common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, the principal amount of the notes will convert into approximately 222,220 shares of common stock.

F-48

4,500,000 Shares

Common Stock

PROSPECTUS

Bookrunning Manager

Cowen and Company

Co-Manager

Leerink Swann

, 2008

Until _____, 2008, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This requirement is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All of the amounts are estimated except the Securities and Exchange Commission registration fee, the FINRA filing fee and the NASDAQ Global Market listing fee.

	Amount to be paid
U.S. Securities and Exchange Commission registration fee	\$ 2,542
NASDAQ Global Market listing fee	100,000
FINRA filing fee	8,780
Printing and mailing	200,000
Legal fees and expenses	2,200,000
Accounting fees and expenses	300,000
Blue sky fees and expenses	10,000
Transfer agent and registrar	12,000
Miscellaneous	66,678
	<hr/>
Total	\$ 2,900,000

Item 14. Indemnification of Directors and Officers.

Our restated certificate of incorporation and restated bylaws that will be effective upon completion of the offering provide that each person who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was one of our directors or officers or is or was serving at our request as a director, officer, or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, whether the basis of such proceeding is alleged action in an official capacity as a director, officer or trustee or in any other capacity while serving as a director, officer or trustee, shall be indemnified and held harmless by us to the fullest extent authorized by the Delaware General Corporation Law against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such.

Section 145 of the Delaware General Corporation Law permits a corporation to indemnify any director or officer of the corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reason to believe his or her conduct was unlawful. In a derivative action (*i.e.*, one brought by or on behalf of the corporation), indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which the action or suit was brought shall

determine that the defendant is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

Pursuant to Section 102(b)(7) of the Delaware General Corporation Law, Article NINTH of our restated certificate of incorporation eliminates the liability of a director to us or our stockholders for monetary damages for such a breach of fiduciary duty as a director, except for liabilities arising:

from any breach of the director's duty of loyalty to us or our stockholders;

from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

under Section 174 of the Delaware General Corporation Law; and

from any transaction from which the director derived an improper personal benefit.

The foregoing discussion of our certificate of incorporation, bylaws, indemnification agreements, and Delaware law is not intended to be exhaustive and is qualified in its entirety by such certificate of incorporation, bylaws, indemnification agreements, or law.

Reference is made to Item 17 of our undertakings with respect to liabilities arising under the Securities Act. Reference is also made to the form of underwriting agreement filed as Exhibit 1.1 to this registration statement for the indemnification agreements between us and the underwriters.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding shares of common stock and preferred stock issued, and options and warrants granted, by us within the past three years that were not registered under the Securities Act. Also included is the consideration, if any, received by us for such shares, options and warrants and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

(a) Issuances of Securities

No underwriters were involved in the sales of securities described below. All purchasers of shares of convertible preferred stock and convertible notes described below represented to us in connection with their purchase that they were accredited investors and were acquiring the shares and notes for investment and not distribution, that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

(i) Original Issuances of Preferred Stock, Common Stock, Convertible Promissory Notes and Warrants.

On October 28, 2004, we issued to Elan 1,092,637 shares of a newly created, non-voting, class of Series AE-3 preferred stock. In return, Elan (i) cancelled a \$8,010,000 promissory note due from the us, including all accrued and unpaid interest in the amount of \$1,717,000 and (ii) transferred 1,109,418 shares of its previously purchased Series AE-1 preferred stock back to us. We then cancelled and retired the Series AE-1 preferred stock.

On October 28, 2004, we issued \$4,500,000 of our convertible promissory notes to certain of our existing stockholders. The principal amount of the convertible promissory notes, plus unpaid interest which accrued at a rate of 10% per annum, was due and payable upon demand of the holders of $66\frac{2}{3}\%$ of the principal amount of the outstanding notes any time on or after July 28, 2005, unless sooner accelerated upon an event of default by us or liquidation, sale or merger of us.

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On March 29, 2005, we issued additional convertible promissory notes in the aggregate principal amount of \$1,000,000 to the same investors. The terms of the promissory notes were the same as those of the October 28, 2004 promissory notes.

From September to December 2005, we issued additional convertible promissory notes in the aggregate principal amount of \$2,000,000 in \$500,000 increments to the same group of our existing stockholders that invested in the convertible promissory notes we issued in October 2004 and March 2005. The principal amount of the notes, plus unpaid interest which accrued at a rate of 10% per annum, was due and payable upon demand of the holders of 66²/₃% of the principal amount of the notes, unless sooner accelerated upon an event of default by us or liquidation, sale or merger of us.

On March 10, 2006 and July 10, 2006, we issued \$1,050,000 and \$500,000, respectively, of additional convertible promissory notes to various investors. The principal amount of the notes, plus unpaid interest which accrued at a rate of 10% per annum, was due and payable upon demand of the holders of 66²/₃% of the principal amount of the Convertible Notes, unless sooner accelerated upon an event of default by us or liquidation, sale or merger of us.

In connection with the issuance of each of the convertible notes described above, we issued warrants to purchase an aggregate of 1,188,451 shares of our common stock at an exercise price of \$0.02 per share that expire ten years from the issue date.

In connection with the entry into capital lease credit lines and certain draw downs made under those credit lines, we issued warrants to purchase an aggregate of 60,841 shares of our common stock at an exercise price of \$3.21 per share.

On July 19, 2006, in conjunction with the strategic partnership agreement with Philips, we issued 2,475,247 shares of our Series A-1 preferred stock for \$2.02 per share, for net proceeds of \$4,999,999.

On May 18, 2007, we issued 1,369,863 shares of our Series C preferred stock to Humana for \$3.65 per share, for net proceeds of \$5,000,000.

On July 13, 2007, we issued 15,803 shares of our common stock to General Electric Capital Corporation as a result of the net exercise of a warrant originally issued for 53,333 shares at an exercise price of \$3.21 per share.

On November 4, 2007, we issued 26,682 shares of our common stock to Oxford Finance Corporation as a result of the net exercise of a warrant originally issued for 40,887 shares at an exercise price of \$3.21 per share.

On November 9, 2007, we issued to Silicon Valley Bank a warrant to purchase 25,608 shares of our common stock at an exercise price of \$7.81 per share.

On November 14, 2007, we issued 19,579 shares of our common stock to Oxford Finance Corporation as a result of the net exercise of a warrant originally issued for 24,910 shares at an exercise price of \$3.21 per share.

On December 27, 2007 we entered into an agreement to issue \$2.0 million aggregate principal amount in convertible notes to entities affiliated with Flagship Ventures, with which our director, Noubar Afeyan, is affiliated, and to Gilde Europe Food & Agribusiness Fund B.V., with which our director, Pieter van der Meer is affiliated. Of the total amount, \$1.4 million will be issued to Flagship and \$600,000 will be issued to Gilde. The notes will be issued prior to the closing of this offering, subject to customary closing conditions, including receiving the consent of our existing lenders. Interest on the notes accrues at the rate of 10% per year. The unpaid principal amount of these notes, together with any interest accrued but unpaid thereon, is payable at any time upon demand of the holder, and if not repaid, will automatically convert upon the closing of this offering into that number of shares of our common stock equal to the quotient obtained by dividing the unpaid principal amount of the notes

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plus interest accrued but unpaid thereon, by the initial public offering price. Assuming an initial public offering price of \$9.00 per share, the mid-point of the price range on the cover page of this prospectus, the principal amount of the notes will convert into approximately 222,220 shares of our common stock.

The securities described in this section (a)(i) of Item 15 were issued to a combination of foreign and U.S. investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(2) under the Securities Act and Rule 506 of Regulation D promulgated thereunder, relative to sales by an issuer not involving any public offering.

(ii) Conversion of Convertible Promissory Notes.

In August 2005, holders of the convertible promissory notes outstanding at that time converted them into an aggregate of 3,919,358 shares of our Series A preferred stock at a price of \$1.50 per share.

In July 2006, holders of the convertible promissory notes outstanding at that time converted them into an aggregate of 2,509,866 shares of our Series A preferred stock at a price of \$1.50 per share.

The securities described in this section (a)(ii) of Item 15 were issued to a combination of foreign and United States investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 3(a)(9) under the Securities Act, relative to an exchange of securities by an issuer with its existing security holders where no commission or other remuneration is paid for soliciting the exchange.

(b) Stock Option Grants and Restricted Stock Awards

Since January 1, 2004, we have granted options to certain of our employees, consultants and others to purchase an aggregate of 4,693,580 shares of common stock as of September 30, 2007. As of September 30, 2007, options to purchase 72,190 shares of common stock had been exercised, options to purchase 1,499,059 shares of common stock had been forfeited, and options to purchase 3,122,331 shares of common stock remained outstanding at a weighted average exercise price of \$1.39 per share. In addition, we have awarded 1,307,226 shares of restricted stock.

The issuance of restricted stock, stock options and the common stock issuable upon the exercise of such options as described in this section (b) of Item 15 were issued pursuant to written compensatory plans or arrangements with our employees, directors and consultants, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

The foregoing securities are deemed restricted securities for purposes of the Securities Act. All certificates representing the issued shares of common stock described in this Item 15 included appropriate legends setting forth that the securities had not been registered and the applicable restrictions on transfer.

Item 16. Exhibits and Financial Statement Schedules.

(a) See the Exhibit Index on the page immediately preceding the exhibits for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules

All other schedules have been omitted because they are not applicable.

Financial Statement Schedules

All schedules have been omitted because they are not required or are not applicable or the required information is shown in the financial statements or notes thereto.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 14 above, or otherwise, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities 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 Securities Act and will be governed by the final adjudication of such issue.

(c) The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

Pieter Muntendam
Attorney-in-fact

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EXHIBIT INDEX

Exhibit
Number

Description of Exhibit

1.1**	Form of Underwriting Agreement.
3.1**	Restated Certificate of Incorporation of the Registrant.
3.1.1**	Amendment to Restated Certificate of Incorporation, dated October 31, 2007.
3.2**	Form of Restated Certificate of Incorporation of the Registrant to be filed upon completion of this offering.
3.3**	Bylaws of the Registrant.
3.4**	Form of Restated Bylaws of the Registrant to be effective upon completion of this offering.
4.1**	Form of Common Stock Certificate.
4.2	Third Amended and Restated Investor Rights Agreement, dated as of May 1, 2007, as amended December 27, 2007.
4.3**	Common Stock Warrant issued to Boston University School of Medicine, dated April 30, 2002.
4.4**	Form of Common Stock Warrant issued to General Electric Capital Corporation.
4.5**	Form of Common Stock Warrant issued to Oxford Finance Corporation.
4.6**	Form of Common Stock Warrant, together with a schedule of warrant holders.
4.7**	Common Stock Warrant issued to Silicon Valley Bank, dated November 9, 2007.
4.8	Securities Purchase Agreement dated as of December 27, 2007.
4.9	Form of Convertible Promissory Note.
5.1**	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Registrant, with respect to the legality of securities being registered.
10.1@**	2001 Stock Option and Incentive Plan, as amended.
10.2@**	Form of Incentive Stock Option Agreement under the 2001 Stock Option and Incentive Plan.
10.3@**	Form of Non-Qualified Stock Option Agreement under the 2001 Stock Option and Incentive Plan.
10.4@**	2007 Employee, Director and Consultant Equity Incentive Plan.
10.5@**	Form of Stock Option Agreement under the 2007 Employee, Director and Consultant Equity Incentive Plan.
10.6**	Agreement by and among the Registrant, the Flagship entities, Gilde Europe Food & Agribusiness Fund, B.V., and Stelios Papadopoulus, dated as of September 30, 2007.
10.7**	Loan and Security Agreement by and between the Registrant and Silicon Valley Bank, dated as of November 9, 2007.
10.7.1+**	Intellectual Property Security Agreement by and between the Registrant and Silicon Valley Bank, dated as of November 9, 2007.
10.8@**	Form of Non-Employee Director Equity Compensation Policy.
10.9@**	Form of Indemnification Agreement between the Registrant and its Directors and Executive Officers.
10.10**	Master Security Agreement by and between the Registrant and General Electric Capital Corporation, dated as of October 3, 2001, as amended.
10.11**	Sublease Agreement by and between the Registrant and GPC Biotech, dated as of April 14, 2005, as amended.
10.12+**	Product License and Collaboration Agreement by and between the Registrant and ACS Biomarker B.V., dated as of May 4, 2007.
10.13+**	Strategic Agreement by and between the Registrant and Humana Inc., dated as of May 25, 2007.
10.14+**	Amended and Restated Strategic Relationship Agreement by and between the Registrant and Nederlandse Organisatie Voor Toegepastnatuurwetenschappelijk Onderzoek TNO, dated as of January 31, 2001, as amended.

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- 10.15+** Participation Agreement by and between the Registrant and Philips Medical Systems Nederland B.V., dated as of December 22, 2006.
- 10.16** Cooperative Research and Development Agreement by and between the Registrant and National Center for Toxicological Research, dated as of February 23, 2007.
- 10.17+** Participation Agreement by and between the Registrant and AstraZeneca AB, dated as of November 24, 2006.
- 10.18+** Participation Agreement by and between the Registrant and Merck & Co., Inc., dated as of July 28, 2006.
- 10.19@** Letter Agreement by and between the Registrant and Pieter Muntendam, dated as of November 29, 2004.
- 10.20@** Letter Agreement by and between the Registrant and Robert McBurney, dated as of March 2, 2003.
- 10.21@** Letter Agreement by and between the Registrant and Stephen Martin, dated as of May 1, 2004.
- 10.22@** Letter Agreement by and between the Registrant and Mark D. Shooman, dated as of May 7, 2007.
- 10.23@** Amended and Restated Change of Control Cash Severance Agreement by and between the Registrant and Pieter Muntendam, dated as of July 20, 2007.
- 10.24@** Amended and Restated Change of Control Cash Severance Agreement by and between the Registrant and Mark D. Shooman, dated as of July 20, 2007.
- 10.25@** Amended and Restated Change of Control Cash Severance Agreement by and between the Registrant and Robert McBurney, dated as of July 20, 2007.
- 10.26@** Amended and Restated Change of Control Cash Severance Agreement by and between the Registrant and Stephen Martin, dated as of July 20, 2007.
- 10.27@** Consulting Agreement by and between the Registrant and Jan van der Greef, dated as of December 29, 2000.
- 21** Subsidiaries of the Registrant.
- 23.1 Consent of Vitale, Caturano & Company, Ltd.
- 23.2** Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (see Exhibit 5.1).
- 24.1** Powers of Attorney (see signature page to initial filing).
-

*

To be filed by amendment.

**

Previously filed.

+

Confidential treatment has been requested for portions of this exhibit.

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Denotes management compensation plan or contract.

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