FORM S-1/A

General form of registration statement for all companies including face-amount certificate companies [amend]

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As filed with the Securities and Exchange Commission on January 10, 2013

Registration No. 333-175102

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

LIPOSCIENCE, INC.

(Exact name of registrant as specified in its charter)

Delaware	8071	56-1879288
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

2500 Sumner Boulevard
Raleigh, NC 27616
(919) 212-1999
(Address, including zip code, and telephone number, including area code, of registrant' s principal executive offices)

Richard O. Brajer
President and Chief Executive Officer
LipoScience, Inc.
2500 Sumner Boulevard
Raleigh, NC 27616
(919) 212-1999
(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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 number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 under the Securities Exchange Act of 1934. (Check one):

Large Accelerated Filer ☐ Accelerated Filer ☐ Non-accelerated Filer ☒ Smaller Reporting Company ☐

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 that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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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 we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated January 10, 2013

PROSPECTUS

5,000,000 Shares

Common stock

This is the initial public offering of the common stock of LipoScience, Inc. We are offering 5,000,000 shares of our common stock. No public market currently exists for our common stock.

We have applied to list our common stock on The NASDAQ Global Market under the symbol "LPDX."

We anticipate that the initial public offering price will be between $13.00 and $15.00 per share.

We are an "emerging growth company" as defined under the federal securities laws and, as such, we may elect to comply with certain reduced public company reporting requirements.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 12 of this prospectus.

	Per share	Total
Price to the public	$	$
Underwriting discounts and commissions	$	$
Proceeds to us (before expenses)	$	$

Some of our existing stockholders and their affiliated entities have indicated an interest in purchasing up to an aggregate of $3.4 million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing stockholders and any of these existing stockholders could determine to purchase more, less or no shares in this offering.

We have granted the underwriters the option to purchase 750,000 additional shares of common stock on the same terms and conditions set forth above if the underwriters sell more than 5,000,000 shares of common stock in this offering.

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

The underwriters expect to deliver the shares on or about , 2013.

Barclays **UBS Investment Bank** **Piper Jaffray**

Prospectus dated , 2013

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You should rely only on the information contained in this prospectus and any related free writing prospectus we may authorize to be delivered to you. We have not, and the underwriters have not, authorized any person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Neither this prospectus nor any related free writing prospectus is an offer to sell, nor are they seeking an offer to buy, these securities in any state where the offer or solicitation is not permitted. The information contained in this prospectus is complete and accurate as of the date on the front cover of this prospectus, but information may have changed since that date.

PROSPECTUS SUMMARY

The items in the following summary are described in more detail later in this prospectus. This summary does not contain all of the information you should consider. Before investing in our common stock, you should read the entire prospectus carefully, including the "Risk Factors" beginning on page 12 and the financial statements and related notes beginning on page F-1. Unless the context indicates otherwise, as used in this prospectus, the terms "LipoScience," "our company," "we," "us" and "our" refer to LipoScience, Inc.

Overview

We are an *in vitro* diagnostic company pioneering a new field of personalized diagnostics based on nuclear magnetic resonance, or NMR, technology. Our first diagnostic test, the *NMR LipoProfile* test, directly measures the number of low density lipoprotein, or LDL, particles in a blood sample and provides physicians and their patients with actionable information to personalize management of risk for heart disease. To date, over 8 million *NMR LipoProfile* tests have been ordered. Our automated clinical analyzer, the *Vantera* system, has recently been cleared by the FDA. The *Vantera* system requires no previous knowledge of NMR technology to operate and has been designed to significantly simplify complex technology through ease of use and walk-away automation. We plan to selectively place the *Vantera* system on-site with national and regional clinical laboratories as well as leading medical centers and hospital outreach laboratories. We are driving toward becoming a clinical standard of care by decentralizing our technology and expanding our menu of personalized diagnostic tests to address a broad range of cardiovascular, metabolic and other diseases.

Approximately 50% of people who suffer a heart attack have normal cholesterol levels. We believe that direct quantification of the number of LDL and other lipoprotein particles using our NMR-based technology platform addresses the deficiencies of traditional cholesterol testing and allows clinicians to more effectively manage their patients' risk of developing cardiovascular disease. We believe that the inherent analytical and clinical advantages of NMR-based technology, which can simultaneously analyze lipoproteins as well as hundreds of small molecule metabolites from blood serum, plasma and several other bodily fluids without time-consuming sample preparation, will also allow us to expand our diagnostic test menu. The scientific community is actively investigating our NMR-based technology for use in the prediction of diabetes, insulin resistance and other metabolic disorders, and we believe that our technology provides an attractive platform for potential expansion of the diagnostic tests we plan to offer into these areas.

Our strategy is to continue to advance patient care by converting clinicians, and the clinical diagnostic laboratories they use, from traditional cholesterol testing to our *NMR LipoProfile* test for the management of patients at risk for cardiovascular disease, with the goal of ultimately becoming a clinical standard of care. An increasing number of large clinical outcome studies, including the Multi-Ethnic Study of Atherosclerosis, or MESA, and the Framingham Offspring Study, indicate that a patient' s number of LDL particles is more strongly associated with the risk of developing cardiovascular disease than is his or her level of LDL cholesterol when one of the measures suggests a higher risk and the other suggests a lower risk. LDL cholesterol, or LDL-C, is a measure of the amount of cholesterol contained in LDL particles and is used to estimate the patient' s LDL level. In the MESA and Framingham studies, participants' blood samples were evaluated to measure LDL particles using our *NMR LipoProfile* test, while their LDL-C levels were measured using a traditional cholesterol test.

Because the *NMR LipoProfile* test provides direct quantification of the number of LDL particles, as well as additional measurements related to a patient' s risk for developing cardiovascular disease, we believe that it has the potential to become a new paradigm by which clinicians evaluate key cardiovascular risk factors to provide better treatment recommendations and improve outcomes, even for patients considered to have normal levels of cholesterol. A 2008 joint consensus statement by the American Diabetes Association, or ADA, and the American College of Cardiology, or ACC, recognized that direct LDL particle measurement by NMR may be a more accurate way to capture the risk posed by LDL than is traditional LDL-C measurement. Additionally, in October 2011, the National Lipid Association, or NLA, convened an expert panel to evaluate the use of a number of

biomarkers other than LDL-C, including LDL particle number, for initial clinical risk assessment of cardiovascular disease and ongoing management of cardiovascular disease risk in patients. The recommendations of this panel included:

> for initial clinical risk assessment, the use of LDL particle number, as well as a number of the other non-LDL-C biomarkers, is reasonable for many patients considered to be at intermediate risk of coronary heart disease, patients with a family history of coronary heart disease and patients with recurrent cardiac events, and it should be considered for selected patients known to have coronary heart disease; and
>
> for ongoing management of risk, the use of LDL particle number, as well as some of the other biomarkers, is reasonable for many patients at intermediate risk, patients with known coronary heart disease and patients with recurrent cardiac events, and it should be considered for selected patients with a family history of coronary heart disease.

During 2011, the *NMR LipoProfile* test was ordered more than 1.5 million times. The number of *NMR LipoProfile* tests ordered increased at a compound annual growth rate of approximately 30% from 2006 to 2011. We generated revenues of $45.8 million for the year ended December 31, 2011 and $41.2 million for the nine months ended September 30, 2012. Our *NMR LipoProfile* test has its own dedicated current procedural terminology, or CPT, code, and is reimbursed by a number of governmental and private payors, which we believe collectively represent approximately 150 million covered lives. These payors include Medicare, TRICARE, WellPoint, United Healthcare and several Blue Cross Blue Shield affiliates.

We estimate that more than 75 million traditional cholesterol tests, or lipid panels, are performed by independent clinical laboratories and hospital outreach laboratories for patient management purposes each year in the United States. Accordingly, we estimate that the 1.5 million *NMR LipoProfile* tests we performed in the year ended December 31, 2011 represented 2% of our potential market. In a number of states where we have targeted our sales and marketing efforts, we estimate that we have achieved market penetration rates of up to 11%. For example, in North Carolina, Alabama and West Virginia, we estimate that the number of *NMR LipoProfile* tests performed represented approximately 11%, 7% and 7%, respectively, of the total cholesterol tests performed in those states for patient management purposes, and 6% in Georgia. We plan to significantly increase our geographic presence across the United States to expand market awareness and penetration of the *NMR LipoProfile* test, with the goal of ultimately becoming a clinical standard of care.

Our clinical laboratory, which is certified under the Clinical Laboratory Improvement Amendments of 1988, or CLIA, allows us to fulfill current demand for our test and we believe serves as a strategic asset that will facilitate our ability to launch new personalized diagnostic tests we plan to develop. To accelerate clinician and clinical diagnostic laboratory adoption of the *NMR LipoProfile* test and future clinical diagnostic tests, we plan to decentralize access to our technology platform through the launch of our new *Vantera* system, our highly automated next-generation version of our NMR-based clinical analyzer technology platform that is designed to be placed directly in clinical diagnostic laboratories. In August 2012, we received FDA clearance to market our *Vantera* system. The *Vantera* system became commercially available in December 2012, and we expect to begin placing the *Vantera* system in third-party clinical diagnostic laboratory facilities in the first quarter of 2013, which we believe will facilitate their ability to offer our *NMR LipoProfile* test and other diagnostic tests that we may develop.

Our Market

Coronary Heart Disease and Atherosclerosis

Coronary heart disease, or CHD, is the second most prevalent form of cardiovascular disease in the United States after hypertension. According to the American Heart Association, CHD accounted for over one-half of all cardiovascular disease deaths in 2006, and the direct medical costs of CHD in the United States are expected to increase from $36 billion in 2010 to $106 billion in 2030. CHD usually results from atherosclerosis, a hardening

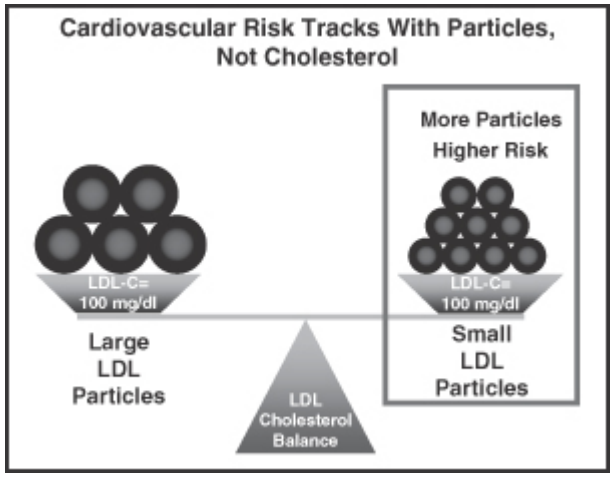
and narrowing of the arteries caused by a buildup of fatty plaque composed of cholesterol and other lipids, such as triglycerides, in the arterial wall. Atherosclerosis is a leading cause of heart attacks and strokes.

Since the 1960s, the scientific community has recognized that LDL particles are a key causal factor for atherosclerosis. However, for many years the only practical way to estimate the amount of LDL and high density lipoproteins, or HDL, was to measure the level of cholesterol contained in these LDL and HDL particles.

Limitations of Traditional Cholesterol Testing

While LDL and HDL testing is a generally well-accepted means to determine a patient' s need for LDL-lowering or HDL-raising therapy and monitoring treatment response, there is increasing awareness that traditional cholesterol measures of these key lipoprotein risk factors are deficient because they can overestimate or underestimate the actual levels of these lipoproteins in many patients and the CHD risk they confer. This is because many patients have disparities between their level of cholesterol and the number of lipoprotein particles in their blood, a state known as discordance. Research data have shown that the number of LDL particles, or LDL-P, is more strongly correlated with CHD risk than is the level of LDL-C in discordant patients, and that the number of HDL particles, or HDL-P, and LDL-P are more predictive of future CHD events than HDL-C and LDL-C levels. As a result, we believe that reliance on the traditional cholesterol measures of LDL and HDL contributes to the under-treatment or over-treatment of millions of patients.

The following graphic illustrates that two patients with the same level of LDL-C can have different numbers of LDL-P, leading to different CHD risk profiles.



Our Solution

Our *NMR LipoProfile* test has been cleared by the FDA for use in our clinical laboratory and directly measures LDL-P for use in managing cardiovascular disease risk. We believe that our test provides clinicians with more clinically relevant information about LDL and other classes and subclasses of lipoproteins than does the traditional cholesterol test for managing their patients' CHD risk.

The current *NMR LipoProfile* test report consists of two pages. The first page includes test results for the following measurements, which have received FDA clearance:

LDL-P, along with reference ranges to guide patient management decisions;

HDL-C; and

triglycerides.

The second page of the *NMR LipoProfile* report includes test results for a number of additional lipoprotein measures that have been validated by us but which have not been cleared by the FDA. These include:

- measures related to cardiovascular risk, including HDL-P, the total number of small LDL particles, and LDL particle size; and
- measures associated with insulin resistance and diabetes risk, including numbers of large HDL particles, small LDL particles and very large LDL, or VLDL, particles, as well as HDL, LDL and VLDL particle size.

When the *Vantera* system is placed in third-party laboratories, they will process the blood sample and produce the FDA-cleared results on the first page of the test report. At the option of the third-party laboratories, we will generate these second-page test results in our clinical laboratory, and make the second-page test results available to them at no additional charge for dissemination along with the first-page results.

Clinical Validation of Lipoprotein Particle Quantification Using NMR

The clinical utility of lipoprotein particle quantification has been supported by a number of scientific papers published in peer-reviewed journals, including *Journal of the American Medical Association*, *New England Journal of Medicine*, *Circulation*, *American Journal of Cardiology*, *Atherosclerosis* and *Journal of Clinical Lipidology*. To date, eleven cardiovascular disease outcome studies have specifically evaluated the link between LDL-P and CHD risk. In each case, LDL-P was associated significantly with atherosclerotic outcomes and, in ten of the studies, the strength of association was greater than for LDL-C. In addition, studies have shown greater clinical relevance of HDL-P as compared to HDL-C. In these scientific studies, LDL-P was measured using our test, while LDL-C was measured using traditional cholesterol testing. In each of these studies, our Chief Scientific Officer, Dr. James Otvos, participated as a scientific collaborator with the studies' academic investigators, none of whom are affiliated with our company. We did not provide any funding for any of these studies.

Our Strategy

Our strategy is to convert clinicians, and the clinical diagnostic laboratories they use, from traditional cholesterol testing to our *NMR LipoProfile* test for the management of patients at risk for CHD, with the goal of ultimately becoming a clinical standard of care. The key elements of our strategy to achieve this goal include:

- Expand our sales force nationally;
- Increase market awareness and educate clinicians about the clinical benefits of our test;
- Expand relationships with clinical diagnostic laboratories;
- Decentralize access to our technology platform with the *Vantera* system;
- Broaden medical policy coverage;
- Pursue inclusion in treatment guidelines;
- Develop and expand relationships with leading academic medical centers; and
- Develop new personalized diagnostic tests using our NMR-based technology platform.

Our Technology Platform

Our technology platform combines proprietary signal processing algorithms and NMR spectroscopic detection into a clinical analyzer to identify and quantify concentrations of lipoproteins and, potentially, small molecule metabolites. NMR detectors, or spectrometers, analyze a blood plasma or serum sample by subjecting it to a short pulse of radio frequency energy within a strong magnetic field. Each lipoprotein particle within a given diameter range simultaneously emits a distinctive radio frequency signal, similar to distinctive ringing sounds for

bells of different sizes. The amplitude, or "volume," of the NMR signal is directly proportional to the concentration of the particular subclass of lipoprotein particles emitting the signal. Our proprietary software then collects, records and analyzes the composite signals emitted by all of the particles in the sample in real time and separates the signals into distinct subclasses. Within minutes, we are able to quantify multiple subclasses of lipoprotein particles.

Our technology platform based on NMR offers the following advantages over conventional methods of quantifying lipoproteins and small molecule metabolites:

Information-rich detection. NMR can analyze lipoproteins as well as potentially hundreds of small molecule metabolites;

Processing efficiency. Our technology does not require physical separation of the lipoprotein particles and does not require chemical reagents in order to evaluate a sample;

Sample indifference. Our technology may be used to analyze multiple sample types, including plasma, serum, urine, cerebrospinal fluid and other biological fluids; and

Throughput. Simultaneous lipoprotein and metabolite quantification from a rapid NMR measurement makes the platform extremely efficient with high throughput.

The *Vantera* System

The *Vantera* system is our next-generation automated clinical analyzer. In August 2012, we received FDA clearance to market the *Vantera* system commercially to laboratories. We intend to decentralize access to our technology through the *Vantera* system in order to drive both geographic expansion and the technology adoption necessary for successful execution of our market conversion strategy. We intend to place the *Vantera* system in select high-volume national and regional clinical diagnostic laboratories, as well as at leading medical centers and hospital outreach laboratories.

We have entered into agreements with some of our current clinical diagnostic laboratory customers to place the *Vantera* system in their laboratories. We are also in discussions with additional laboratory customers who have indicated a similar interest in the placement of the *Vantera* system. We currently expect these placements to begin in the first quarter of 2013.

As with our existing clinical analyzers, the *Vantera* system uses NMR spectroscopy and proprietary signal processing algorithms to identify and quantify lipoproteins and metabolites from a single spectrum, or scan. We believe that the *Vantera* system provides the following strategic and technological benefits:

direct access to our technology on site, rather than relying on a "send-out" test;

processing of samples at a rate that is approximately twice as fast as our current-generation analyzers;

a reagent-less platform requiring no sample preparation for analysis;

multiple NMR-test processing capabilities; and

limited operator intervention, with no specialized NMR training required for operation.

Risks Related to Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus immediately following this prospectus summary. These risks include, among others:

Our ability to successfully execute our business strategy is dependent on our achieving greater market acceptance of the *NMR LipoProfile* test.

A small number of clinical diagnostic laboratory customers account for most of our revenues from sales of our *NMR LipoProfile* test.

We had an accumulated deficit of $48.2 million as of September 30, 2012, we incurred a net loss of $0.5 million for the year ended December 31, 2011 and, while we generated net income of $1.1 million during the nine months ended September 30, 2012, we expect to incur losses for the next several years as we increase our expenses in an effort to increase market share for our *NMR LipoProfile* test and to develop new diagnostic tests. In addition, we have $16.0 million in term loans with two banks that require us to make monthly installment payments through July 2016 and a revolving line of credit with one of these banks that matures in December 2013.

Even though our next-generation *Vantera* clinical analyzer has received FDA clearance, if clinical diagnostic laboratories are not receptive to placement of the *Vantera* system in their facilities, or are not satisfied with such system after placement in their facilities, a key element of our business strategy may not be successful.

Health insurers, accountable care organizations and other third-party payors may decide not to cover, or may discontinue reimbursing, our *NMR LipoProfile* test or any other diagnostic tests we may develop in the future, or may provide inadequate reimbursement.

We rely on a limited number of key suppliers for the components used in the *Vantera* system and other necessary supplies to perform our *NMR LipoProfile* test.

Our ability to meet increased demand for our *NMR LipoProfile* test will be harmed if we are unable to place the *Vantera* system in third-party diagnostic laboratories.

If we do not successfully develop or acquire and introduce new personalized diagnostic tests or other applications of our NMR-based technology, we may not be able to generate additional revenue opportunities.

We have limited patent protection for the *NMR LipoProfile* test and may have limited patent protection for future tests that we may develop. As a result, our intellectual property position may not adequately protect us from competitors for sales of our *NMR LipoProfile* test or any future diagnostic tests we may develop.

The *NMR LipoProfile* test is, and any other test for which we obtain marketing approval will be, subject to extensive ongoing regulatory requirements, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products.

Corporate Information

We were incorporated under the laws of North Carolina in June 1994 under the name LipoMed, Inc. and reincorporated under the laws of Delaware in June 2000. In January 2002, we changed our corporate name to LipoScience, Inc. Our principal executive office is located at 2500 Sumner Boulevard, Raleigh, North Carolina. Our telephone number is (919) 212-1999. Our website address is *www.liposcience.com.* Information contained in, or accessible through, our website does not constitute a part of, and is not incorporated into, this prospectus.

LIPOSCIENCE®, NMR LIPOPROFILE® and VANTERA® are our registered United States trademarks. All other trademarks, trade names or service marks referred to in this prospectus are the property of their respective owners.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe that these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

The Offering

Common stock offered by us	5,000,000 shares
Common stock to be outstanding after this offering	13,888,795 shares
Over-allotment option	750,000 shares
Use of proceeds	We estimate that the net proceeds from our sale of shares of our common stock in this offering will be approximately $61.6 million, or approximately $71.4 million if the underwriters exercise their over-allotment option in full, based upon an assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We currently expect to use the net proceeds from this offering as follows: • $5.2 million upon the closing of this offering to pay dividends on the outstanding shares of Series F redeemable convertible preferred stock that will convert into common stock; • approximately $22.6 million to hire additional sales and marketing personnel and to support costs associated with increased sales and marketing activities; • approximately $18.0 million for capital expenditures, including components of the *Vantera* system and other improvements to our laboratory infrastructure; • approximately $4.8 million to fund our research and development programs, including the expansion of our diagnostic test menu based on the *Vantera* system; and • the balance for other general corporate purposes, including general and administrative expenses, working capital and the potential repayment of indebtedness. These estimates are subject to change. See "Use of Proceeds."
Risk factors	See the section titled "Risk Factors" beginning on page 12 and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Proposed NASDAQ Global Market symbol	LPDX

Some of our existing stockholders and their affiliated entities, including holders of more than 5% of our common stock, have indicated an interest in purchasing up to an aggregate of $3.4 million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing stockholders and any of these existing stockholders could determine to purchase more, less or no shares in this offering. Any shares purchased by these stockholders will be subject to the lock-up agreements described in the "Underwriting" section of this prospectus.

The number of shares of our common stock that will be outstanding immediately after this offering is based on 8,888,795 shares of common stock outstanding as of December 31, 2012, and excludes:

- 2,056,848 shares of our common stock issuable upon the exercise of stock options outstanding under our 1997 stock option plan and 2007 stock incentive plan as of December 31, 2012, at a weighted average exercise price of $5.56 per share;
- 85,430 shares of our common stock issuable upon the exercise of outstanding warrants as of December 31, 2012, at an exercise price of $8.97 per share; and
- 1,212,500 shares of our common stock to be reserved for future issuance under our equity incentive plans following this offering.

Except as otherwise indicated herein, all information in this prospectus, including the number of shares that will be outstanding after this offering, assumes or gives effect to:

- a 0.485- for -1 reverse stock split of our common stock effected on January 10, 2013;
- the conversion of all outstanding shares of our convertible preferred stock into an aggregate of 6,994,517 shares of our common stock, which will occur automatically upon the closing of this offering; and
- no exercise of the underwriters' over-allotment option.

Summary Financial Data

The following tables summarize our financial data. We have derived the following summary of our statement of operations data for the years ended December 31, 2009, 2010 and 2011 from our audited financial statements appearing later in this prospectus. We have derived the following summary of our statement of operations data for the nine months ended September 30, 2011 and 2012 and balance sheet data as of September 30, 2012 from our unaudited financial statements appearing later in this prospectus.

The unaudited financial data include, in the opinion of our management, all adjustments, consisting only of normal recurring adjustments, that are necessary for a fair presentation of our financial position and results of operations for these periods. Our historical results are not necessarily indicative of the results that may be expected in the future and our results for any interim period are not necessarily indicative of the results that may be expected for a full fiscal year. You should read the summary of our financial data set forth below together with our financial statements and the related notes to those statements, as well as "Management' s Discussion and Analysis of Financial Condition and Results of Operations" appearing later in this prospectus.

Pro forma basic and diluted net (loss) income per common share have been calculated assuming the conversion of all outstanding shares of convertible preferred stock into shares of common stock. See Note 1 to our financial statements for an explanation of the method used to determine the number of shares used in computing historical and pro forma basic and diluted net (loss) income per common share.

We have presented the summary balance sheet data:

- on an actual basis as of September 30, 2012;
- on a pro forma basis to give effect to:
  - the conversion of all then outstanding shares of our convertible preferred stock into an aggregate of 6,985,817 shares of our common stock, which will occur automatically upon the closing of this offering;
  - the payment of $5.2 million of accrued dividends on the outstanding shares of Series F redeemable convertible preferred stock that will convert into common stock upon the closing of this offering; and
  - the reclassification of the preferred stock warrant liability to additional paid-in-capital upon conversion of the convertible preferred stock issuable upon exercise of such warrants into common stock; and
- on a pro forma as adjusted basis to give further effect to our sale of 5,000,000 shares of common stock in this offering at an assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information presented in the summary balance sheet data is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, would increase or decrease each of cash and cash equivalents, total assets and total stockholders' equity on a pro forma as adjusted basis by approximately $4.7 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase or decrease of 1,000,000 in the number of shares we are offering would increase or decrease each of cash and cash equivalents, total assets and total stockholders' equity on a pro forma as adjusted basis by approximately $13.0 million, assuming the assumed initial public offering price per share, which is the midpoint of the range set forth on the cover page of this prospectus, remains the same.

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
	(in thousands, except share and per share data)				
Statement of Operations Data:					
Revenues	$34,713	$39,368	$45,807	$33,328	$41,241
Cost of revenues	7,792	8,139	8,529	6,367	7,622
Gross profit	26,921	31,229	37,278	26,961	33,619
Operating expenses:					
Research and development	6,156	7,276	7,808	5,698	7,418
Sales and marketing	12,990	15,246	21,305	15,453	16,746
General and administrative	7,020	7,331	8,550	6,248	7,764
Gain on extinguishment of other long-term liabilities	–	(2,700)	–	–	–
Total operating expenses	26,166	27,153	37,663	27,399	31,928
Income (loss) from operations	755	4,076	(385)	(438)	1,691
Total other (expense) income	(495)	220	(163)	(130)	(634)
Income (loss) before taxes	260	4,296	(548)	(568)	1,057
Income tax expense (benefit)	2	(16)	–	–	–
Net income (loss)	258	4,312	(548)	(568)	1,057
Accrual of dividends on redeemable convertible preferred stock	(1,040)	(1,040)	(613)	(612)	–
Undistributed earnings allocated to preferred stockholders	–	(2,655)	–	–	(850)
Net (loss) income attributable to common stockholders - basic	(782)	617	(1,161)	(1,180)	207
Undistributed earnings re-allocated to common stockholders	–	303	–	–	109
Net (loss) income attributable to common stockholders - diluted	$(782)	$920	$(1,161)	$(1,180)	$316
Net (loss) income attributable to common stockholders per share - basic	$(0.49)	$0.38	$(0.69)	$(0.71)	$0.12
Net (loss) income attributable to common stockholders per share - diluted	$(0.49)	$0.34	$(0.69)	$(0.71)	$0.11

Weighted average shares of common stock outstanding used in computing net (loss) income per share – basic	1,596,920	1,611,843	1,674,018	1,666,820	1,704,736
Weighted average shares income of common stock outstanding used in computing net (loss) income per share – diluted	1,596,920	2,713,770	1,674,018	1,666,820	2,984,817
Pro forma net (loss) income per share of common stock – basic			$(0.09)		$0.07
Pro forma net (loss) income per share of common stock – diluted			$(0.09)		$0.06
Weighted average shares of common stock outstanding used in computing pro forma net (loss) income per share – basic			8,659,971		8,690,689
Weighted average shares of common stock outstanding used in computing pro forma net (loss) income per share – diluted			8,659,971		9,970,770

	As of September 30, 2012		
	Actual	Pro forma	Pro forma as adjusted
		(in thousands)	
Balance Sheet Data:			
Cash and cash equivalents	$10,279	$5,079	$69,335
Accounts receivable, net	8,057	8,057	8,057
Total assets	33,549	28,349	92,605
Revolving line of credit[1]	3,500	3,500	3,500
Current maturities of long-term debt[1]	2,400	2,400	2,400
Long-term debt, less current maturities[1]	1,800	1,800	1,800
Preferred stock warrant liability	462	–	–
Total liabilities	15,480	15,018	15,018
Redeemable convertible preferred stock and convertible preferred stock	57,165	–	–
Additional paid-in capital	9,089	61,508	125,759
Accumulated deficit	(48,186)	(48,186)	(48,186)
Total stockholders' (deficit) equity	(39,094)	13,331	77,587

(1) Subsequent to September 30, 2012, we refinanced our indebtedness. As of December 31, 2012, our indebtedness consisted of $16.0 million in term loans, all of which was classified as long-term on our balance sheet, and $5.0 million borrowed under our revolving line of credit, all of which was classified as current liabilities on our balance sheet.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information included in this prospectus, before you decide to purchase shares of our common stock. If any of the following risks actually occurs, they may harm our business, prospects, financial condition and operating results. As a result, the trading price of our common stock could decline and you could lose part or all of your investment.

Risks Related to Our Business and Strategy

Our ability to successfully execute our strategy is dependent on our achieving greater market acceptance of the NMR LipoProfile test.

Our ability to generate revenue depends on our successful marketing of the *NMR LipoProfile* test. The *NMR LipoProfile* test accounted for 85% of our revenues for the year ended December 31, 2009, 87% of our revenues for the year ended December 31, 2010, 93% of our revenues for the year ended December 31, 2011 and 94% of our revenues for the nine months ended September 30, 2012. We expect that our revenues and profitability will depend on sales of the *NMR LipoProfile* test for the foreseeable future.

There is not currently widespread awareness of the *NMR LipoProfile* test among clinicians, even though the test has been available since 1999. In order to achieve greater market acceptance of the *NMR LipoProfile* test, we must continue to demonstrate to clinicians, other healthcare professionals, clinical diagnostic laboratories, healthcare thought leaders and third-party payors that the test is a clinically useful and cost-effective diagnostic test and disease management tool for cardiovascular disease risk providing improved or additional benefits over traditional cholesterol testing, which has been widely accepted as effective for managing cardiovascular risk for many years.

When seeking testing and management recommendations for coronary heart disease, many physicians and other clinicians look to clinical guidelines published by influential organizations. Such organizations include the National Cholesterol Education Program, or NCEP, an authority on cholesterol management overseen by the National Heart, Lung and Blood Institute, or NHLBI, part of the National Institutes of Health, and the American Heart Association. The *NMR LipoProfile* test is not currently included in guidelines published by NCEP or the American Heart Association. If we are not successful in our strategy of gaining inclusion in the guidelines published by these or other organizations, it could ultimately limit market adoption of the *NMR LipoProfile* test.

A study published in May 2012 in *Circulation,* a peer-reviewed scientific journal published by the American Heart Association, evaluated frozen archived blood samples collected between 1994 and 1997 from approximately 20,000 United Kingdom subjects, and concluded that LDL-P and traditional cholesterol testing have similar predictive value for the incidence of CHD. Although this paper did not include data analyses addressing the utility of these measurements for patient management in discordant subjects, and therefore in our view does not diminish the weight of scientific evidence supporting the utility of LDL-P testing in discordant patients, it is possible that readers may misunderstand this paper, which could make it more difficult to persuade clinicians and publishers of clinical guidelines of the benefits of our *NMR LipoProfile* test over traditional cholesterol testing.

A small number of clinical diagnostic laboratory customers account for most of the sales of our NMR LipoProfile test. If any of these laboratories orders fewer tests from us for any reason, our revenues could decline.

For the year ended December 31, 2011 and the nine months ended September 30, 2012, we generated 76% and 88% of our revenues, respectively, from clinical diagnostic laboratory customers. Sales to one of these laboratories, Laboratory Corporation of America Holdings, or LabCorp, accounted for 33% of our revenues for the year ended December 31, 2010, 33% of our revenues for the year ended December 31, 2011 and 29% of our

revenues for the nine months ended September 30, 2012. Sales to a second laboratory customer, Health Diagnostics Laboratory, Inc., accounted for 21% of our revenues for the year ended December 31, 2011 and 32% of our revenues for the nine months ended September 30, 2012.

Our current agreements with our laboratory customers do not require them to purchase any minimum quantities of the *NMR LipoProfile* test. In addition, these customers generally have the right to terminate their respective agreements with us at any time. If any major customer were to terminate its relationship with us, or to substantially diminish its purchases of the *NMR LipoProfile* test, our revenues could significantly decline or it could adversely impact our revenue growth.

We expect to incur losses for the next several years as we increase expenses in our effort to increase market share for the NMR LipoProfile test, place the Vantera system in third-party clinical diagnostic laboratories, and develop new personalized diagnostic tests.

Although we generated net income for the nine months ended September 30, 2012, we incurred a net loss of $0.5 million for the year ended December 31, 2011 and have incurred significant losses since our inception. As of September 30, 2012, we had an accumulated deficit of $48.2 million. We anticipate experiencing losses for the next several years as we increase expenses in pursuit of our growth strategy and our efforts to increase market share for the *NMR LipoProfile* test, place the *Vantera* system in third-party clinical diagnostic laboratories, and develop new personalized diagnostic tests.

Historically, our losses have resulted principally from research and development programs, our sales and marketing efforts, and our general and administrative expenses. We expect to continue to incur significant operating expenses and anticipate that our expenses and losses will increase due to costs relating to, among other things:

- expansion of our direct sales force and increasing our marketing capabilities to promote market awareness and acceptance of our *NMR LipoProfile* test;
- placement of the *Vantera* system in third-party clinical diagnostic laboratories;
- development of and, as necessary, pursuit of regulatory approvals for, new diagnostic tests;
- expansion of our operating capabilities;
- maintenance, expansion and protection of our intellectual property portfolio and trade secrets;
- employment of additional clinical, quality control, scientific and management personnel; and
- employment of operational, financial, accounting and information systems personnel, consistent with expanding our operations and our status as a newly public company.

To become and remain profitable, we must succeed in increasing sales of our *NMR LipoProfile* test or develop and commercialize new tests with significant market potential, and place the *Vantera* system in third-party clinical diagnostic laboratories. We may never succeed in these activities and may never generate revenues that are sufficient to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain consistently profitable would likely depress the market price of our common stock and could significantly impair our ability to raise capital, expand our business or continue to pursue our growth strategy.

If we do not establish relationships with additional clinical diagnostic laboratories, we may not be able to increase the number of NMR LipoProfile tests we sell.

A significant element of our strategy is to leverage relationships with clinical diagnostic laboratories to increase market acceptance of the *NMR LipoProfile* test and gain market share. Most clinicians who request traditional cholesterol tests, our *NMR LipoProfile* test and other diagnostic tests to evaluate cardiovascular disease risk order these tests through clinical diagnostic laboratories.

If we are unable to establish relationships with additional clinical diagnostic laboratories, clinicians who order tests through these laboratories may be unwilling or unable to order our *NMR LipoProfile* test. In addition, we would not have the benefit of leveraging the sales, marketing and distribution capabilities of these laboratories, which we believe is important to our ability to increase awareness of and expand utilization of the *NMR LipoProfile* test. As a result, if we are unable to establish additional clinical laboratory relationships, our ability to increase sales of our *NMR LipoProfile* test and to successfully execute our strategy could be compromised.

We will need to expand our marketing and sales capabilities in order to increase demand for our NMR LipoProfile test, to expand geographically and to successfully commercialize any other personalized diagnostic tests we may develop.

We believe our current sales and marketing operations are not sufficient to achieve the level of market awareness and sales required for us to attain significant commercial success for our *NMR LipoProfile* test, to expand our geographic presence and to successfully commercialize any other diagnostic tests we may develop. In order to increase sales of our *NMR LipoProfile* test, we will need to:

- expand our direct sales force in the United States by recruiting additional sales representatives in selected markets;
- educate clinicians, other healthcare professionals, clinical diagnostic laboratories, healthcare thought leaders and third-party payors regarding the clinical benefits and cost-effectiveness of our *NMR LipoProfile* test;
- expand our number of clinical diagnostic laboratory and hospital outreach laboratory customers; and
- establish, expand and manage sales and reimbursement arrangements with third parties, such as clinical diagnostic laboratories and insurance companies.

We have limited experience in selling and marketing the *NMR LipoProfile* test nationally, and we have no experience in placing and servicing the *Vantera* system in third-party clinical diagnostic laboratories for commercial purposes. We intend to hire a significant number of additional sales and marketing personnel with experience in the diagnostic, medical device or pharmaceutical industries. We may face competition from other companies in these industries, some of whom are much larger than us and who can pay significantly greater compensation and benefits than we can, in seeking to attract and retain qualified sales and marketing employees. If we are unable to hire and retain qualified sales and marketing personnel, our business will suffer.

Furthermore, in order to successfully commercialize diagnostic tests that we may develop in the future, we may need to conduct lengthy, expensive clinical trials and develop dedicated sales and marketing operations to achieve market awareness and demand. If we are not able to successfully implement our marketing, sales and commercialization strategies, we may not be able to expand geographically, increase sales of our *NMR LipoProfile* test or successfully commercialize any future diagnostic tests that we may develop.

The diagnostic industry is subject to rapidly changing technology which could make our current test and the tests we are developing obsolete unless we continue to develop and manufacture new and improved tests and pursue new market opportunities.

Our industry is characterized by rapid technological changes, frequent new product introductions and enhancements and evolving industry standards. Our future success will depend on our ability to keep pace with the evolving needs of our customers on a timely and cost-effective basis and to pursue new market opportunities that develop as a result of technological and scientific advances. These new market opportunities may be outside the scope of our expertise or in areas which have unproven market demand, and the utility and value of new tests that we develop may not be accepted in the market. Our inability to gain market acceptance of new tests could harm our future operating results. Further, if new research or clinical evidence or economic comparative evidence arises that supports a different marker for coronary heart disease risk, demand for our test could decline.

Our NMR LipoProfile test competes with other diagnostic testing methods that may be more widely accepted than our test.

The clinical diagnostics market is highly competitive, and we must be able to compete effectively against existing and future competitors in order to be successful. In selling our *NMR LipoProfile* test, we compete primarily with existing diagnostic, detection and monitoring technologies, particularly the conventional lipid panel test, which is relatively inexpensive, widely reimbursed and broadly accepted as an effective test for managing the risk of developing cardiovascular disease. We also compete against companies that offer other methods for directly or indirectly measuring cholesterol concentrations, lipoproteins or lipoprotein particles. For example, measuring apolipoprotein B, or apoB, is an indirect way to approximate LDL-P. ApoB tests are offered by many clinical diagnostic laboratories and are generally less expensive than our tests. It is possible that apoB, or other competing tests, could be perceived by clinicians as more cost-effective than our test in providing information useful in managing CHD risk. In addition, some competitors offering these competing technologies may have longer operating histories, better name recognition and greater financial, technical, sales, marketing, distribution and public relations resources than we have. They may also have more experience in research and development, regulatory matters, manufacturing and marketing than we do, and may have established broad third-party reimbursement for their tests. If we do not compete successfully, we will not be able to increase our market share and our business will be seriously harmed.

Even though the Vantera system has received regulatory clearance in the United States, if laboratories are not receptive to placement of the Vantera system at their facilities, or if we do not receive regulatory clearance of the Vantera system in other jurisdictions, our growth strategy may not be successful.

A key element of our strategy is to place the *Vantera* system, our next-generation automated clinical NMR analyzer, on site with selected clinical diagnostic laboratory customers to broaden access to our technology and increase demand for our *NMR LipoProfile* test and any future diagnostic tests that we may develop. Although we received clearance from the FDA to perform the FDA-cleared measurements of the *NMR LipoProfile* test using the *Vantera* system in August 2012, we have not applied for clearance from comparable regulatory agencies in other countries for the *Vantera* system, and we may not receive regulatory clearance for the commercial use of the *Vantera* system in other countries on a timely basis, or at all. Even though the *Vantera* system is cleared by the FDA, it may not gain significant acceptance by clinical diagnostic laboratories, or these laboratories may not be satisfied with the *Vantera* system after it is placed in their facilities. If clinical diagnostic laboratories do not accept the placement of the *Vantera* system in their facilities, our ability to grow our business by deploying the *Vantera* system could be compromised.

We currently do not generate significant revenue from sales of the *NMR LipoProfile* test to laboratory customers in the State of California. Among other things, California law restricts a clinical diagnostic laboratory from charging its customers a mark-up on the price of diagnostic tests performed by a third-party laboratory. We believe that the FDA clearance for the *Vantera* system will facilitate our ability to drive conversion in the California market by allowing our clinical diagnostic laboratory customers to perform the *NMR LipoProfile* test themselves using the *Vantera* system. If clinical laboratories do not accept the placement of the *Vantera* system in their facilities, we may need to pursue other strategies in order to increase the amount of our business from clinical laboratory customers who serve the California market.

We rely on two key suppliers for the components used in the Vantera system. If we were to lose either of these suppliers, our ability to broadly place the Vantera system could be compromised.

We currently rely on a single supplier, Agilent Technologies, Inc., for the magnet, probe and console incorporated in the *Vantera* system. These are the key components of the analyzers necessary to perform our *NMR LipoProfile* test. We are party to a supply agreement with Agilent pursuant to which we have agreed to exclusively purchase all of our NMR-related components from them. We are also party to a production agreement with KMC Systems, Inc. under which KMC is our exclusive manufacturer of the sample handler and shell for the *Vantera* system.

We are currently aware of one other primary supplier of NMR spectrometers, Bruker BioSpin, part of Bruker Corporation. We have in the past acquired NMR spectrometers from Bruker BioSpin, and we use them in our current generation of NMR clinical analyzers, but we do not currently have an agreement or relationship with Bruker BioSpin. In the event it is necessary or desirable to acquire NMR spectrometers from Bruker BioSpin, we might not be able to obtain them on commercially reasonable terms, if at all. It could also require significant time and expense to redesign our current analyzers or the *Vantera* system to work with the spectrometers provided by another company.

If we are unable to obtain the NMR components we need at a reasonable price or on a timely basis, we may be unable to maintain the analyzers we use in our facility to perform our *NMR LipoProfile* test, which could compromise our ability to meet our customers' orders for the test. Likewise, if the components or any other part of the *Vantera* system are not available when needed, we may not be able to place the *Vantera* system broadly, which could impair our ability to pursue our growth strategy.

Our ability to meet increased demand for our NMR LipoProfile test will be harmed if we are unable to place the Vantera system in third-party diagnostic laboratories.

We have recently experienced rapid growth in orders of our *NMR LipoProfile* test. We perform our *NMR LipoProfile* test using our current generation NMR analyzers, as well as our *Vantera* system analyzers, located in our laboratory facility in Raleigh, North Carolina. If demand for our test grows to the point at which it exceeds our existing capacity, we will be required to add capacity in order to meet this demand. We do not expect to be able to expand capacity through the addition of more of our existing NMR clinical analyzers, because those analyzers use NMR spectrometers from Bruker BioSpin, a supplier with whom we no longer have an agreement or relationship. Instead, we intend to meet additional demand for our test by using a decentralization strategy of placing our *Vantera* system in the facilities of clinical diagnostic laboratories, as well as utilizing additional *Vantera* system analyzers at our laboratory facility in Raleigh, North Carolina.

If we are unsuccessful in broadly placing the *Vantera* system in third-party diagnostic laboratories for any reason, we may be unable to meet demand that exceeds our current capacity. In that case, we would need to meet increased demand by performing our *NMR LipoProfile* test on *Vantera* system analyzers located in our own laboratory and we might not be successful in doing so.

We rely on a single supplier for our branded blood collection tubes, called LipoTubes, which are used to collect a majority of our blood samples for testing.

We use an exclusive supplier for LipoTubes, which are produced according to our specifications. An alternate supplier might not be easily located, and if we are unable to obtain these tubes from this vendor for any reason, our ability to perform our test and maintain effective relationships with our current clinical customers would be impaired.

If we do not successfully develop or acquire and introduce new personalized diagnostic tests or other applications of our technology, we may not generate new sources of revenue and may not be able to successfully implement our growth strategy.

Our business strategy includes the acquisition, development and introduction of new clinical diagnostic applications of our NMR-based technology in addition to our *NMR LipoProfile* test. Additionally, we believe that for our *Vantera* system to be attractive to laboratories to place in their facilities, it may be necessary for us to offer additional tests for use on the *Vantera* system. All of our diagnostic tests under development will require significant additional research and development, a commitment of significant additional resources and possibly costly and time-consuming clinical testing prior to their commercialization. Our technology is complex, and we cannot be sure that any tests under development will be developed successfully, be proven to be effective, offer diagnostic or other improvements over currently available tests, meet applicable regulatory standards, be produced in commercial quantities at acceptable costs or be successfully marketed.

We may also in the future seek to acquire complementary products or technologies from third parties. Integrating any product or technology we acquire could be expensive and time-consuming, disrupt our ongoing business and distract our management. If we are unable to integrate any tests or technologies effectively, we may not be able to implement our business model. If we do not successfully develop new clinical diagnostic applications of our NMR-based technology or acquire complementary diagnostic products, we could lose interest from academic medical centers and could also lose revenue opportunities with existing or future clinical laboratory customers.

If we are not able to retain and recruit qualified management, sales and marketing, regulatory and research and development personnel, we may be unable to successfully execute our business strategy.

Our future success depends to a significant extent on the skills, experience and efforts of our senior management team, including Richard O. Brajer, our President and Chief Executive Officer; Lucy G. Martindale, our Chief Financial Officer; James D. Otvos, our Chief Scientific Officer and founder; Timothy J. Fischer, our Chief Operating Officer; and Thomas S. Clement, our Vice President of Regulatory and Quality Affairs. The loss of any or all of these individuals, or other management personnel, could harm our business and might significantly delay or prevent the achievement of our business objectives. We have entered into an employment agreement or offer letters with each of these individuals and with our other executives. The existence of an employment agreement or offer letter does not, however, guarantee retention of these employees, and we may not be able to retain those individuals for the duration of or beyond the end of their respective terms. We do not maintain key person life insurance on any of our management personnel.

Recruiting and retaining qualified sales and marketing, regulatory, scientific and laboratory 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 numerous diagnostic, medical device, pharmaceutical and biotechnology companies for similarly skilled personnel.

If we are unable to successfully manage our growth, our business will be harmed.

During the past several years, we have significantly expanded our operations. We expect this expansion to continue to an even greater degree following completion of this offering as we seek to expand nationally and explore potential expansion into international markets. Our growth has placed and will continue to place a significant strain on our management, operating and financial systems and our sales, marketing and administrative resources. As a result of our growth, our operating costs may escalate even faster than planned, and some of our internal systems may need to be enhanced or replaced. If we cannot effectively manage our expanding operations and our costs, we may not be able to continue to grow or we may grow at a slower pace and our business could be adversely affected.

We currently perform our tests exclusively in one laboratory facility. If this or any future facility or our equipment were damaged or destroyed, or if we experience a significant disruption in our operations for any reason, our ability to continue to operate our business could be materially harmed.

We currently perform our *NMR LipoProfile* tests exclusively in a single laboratory facility in Raleigh, North Carolina. If this or any future facility were to be damaged, destroyed or otherwise unable to operate, whether due to fire, floods, hurricanes, storms, tornadoes, other natural disasters, employee malfeasance, terrorist acts, power outages, or otherwise, or if performance of our analyzers is disrupted for any other reason, we may not be able to perform our tests or generate test reports as promptly as our customers expect, or possibly not at all. If we are unable to perform our tests or generate test reports within a timeframe that meets our customers' expectations, our business, financial results and reputation could be materially harmed.

Currently, we maintain insurance coverage totaling $12 million against damage to our property and equipment and an additional $10 million to cover business interruption and research and development restoration expenses, subject to deductibles and other limitations. If we have underestimated our insurance needs with respect to an interruption, or if an interruption is not subject to coverage under our insurance policies, we may not be able to cover our losses.

Failure in our information technology, storage systems or our analyzers could significantly disrupt our operations and our research and development efforts, which could adversely impact our revenues, as well as our research, development and commercialization efforts.

Our ability to execute our business strategy depends, in part, on the continued and uninterrupted performance of our information technology, or IT, systems, which support our operations and our research and development efforts, as well as our storage systems and our clinical analyzers, including the *Vantera* system analyzers. Due to the sophisticated nature of the NMR technology we use in our testing, we are substantially dependent on our 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 and back-up 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, and in particular to operate our NMR analyzers, including any *Vantera* system analyzers placed in third-party clinical diagnostic laboratories, could adversely affect our ability to operate our business. Any interruption in the operation of our NMR analyzers, due to IT system failures, part failures or potential disruptions in the event we are required to relocate our analyzers within our facility or to another facility, or failures of the *Vantera* system analyzers within the facilities of third-party clinical diagnostic laboratories, could have an adverse effect on our operations.

We rely on courier delivery services to transport samples to our facility for analysis. If these delivery services are disrupted, our business and customer satisfaction could be negatively impacted.

Clinicians and clinical laboratories ship samples to us by air and ground express courier delivery service for analysis in our Raleigh, North Carolina facility. Disruptions in delivery service, whether due to bad weather, natural disaster, terrorist acts or threats, or for other reasons, can adversely affect specimen quality and our ability to provide our services on a timely basis to customers.

Our business involves the use of hazardous materials that could expose us to environmental and other liabilities.

Our laboratory facility is subject to various local, state and federal laws and regulations relating to safe working conditions, laboratory and manufacturing practices and the use and disposal of hazardous or potentially hazardous substances, including chemicals, biological materials and various compounds used in connection with our research and development activities. In the United States, these laws include the Occupational Safety and Health Act, the Toxic Test Substances Control Act and the Resource Conservation and Recovery Act. We cannot assure you that accidental contamination or injury to our employees and third parties from hazardous materials will not occur. We do not have insurance to cover claims arising from our use and disposal of these hazardous substances other than limited clean-up expense coverage for environmental contamination due to an otherwise insured peril, such as fire.

If product liability lawsuits are successfully brought against us, we may incur substantial liabilities that could have a significant negative effect on our financial condition or reputation.

Diagnostic testing entails the risk of product liability, and we may be exposed to liability claims arising from the use of our tests. We maintain product liability insurance that is subject to deductibles and coverage limitations and is in an amount that we believe to be reasonable. We cannot be certain, however, that our product liability insurance will be sufficient to protect us against losses due to liability. As a result, we may be required to pay all or a portion of any successfully asserted product liability claim out of our cash reserves. Furthermore, we cannot be certain that product liability insurance will continue to be available to us on commercially reasonable terms or in sufficient amounts. We can provide no assurance that we will be able to avoid significant product liability claims, which could hurt our reputation and our financial condition.

If we expand sales of our products or place the Vantera system outside of the United States, our business will be susceptible to costs and risks associated with international operations.

As part of our longer-term growth strategy, we may decide to target select international markets to grow our presence outside of the United States. Conducting international operations would subject us to new risks that, generally, we have not faced in the United States, including:

- fluctuations in currency exchange rates;
- longer accounts receivable payment cycles and difficulties in collecting accounts receivable;
- uncertain regulatory registration and approval processes for seeking clearance of the *Vantera* system and our diagnostic tests;
- competition from companies located in the countries in which we offer our products, which may be a competitive disadvantage;
- difficulties in managing and staffing international operations and assuring compliance with foreign corrupt practices laws;
- the possibility of management distraction;
- potentially adverse tax consequences, including the complexities of foreign value added tax systems, tax inefficiencies related to our corporate structure and restrictions on the repatriation of earnings;
- increased financial accounting and reporting burdens and complexities;
- political, social and economic instability abroad, terrorist attacks and security concerns in general; and
- reduced or varied protection for intellectual property rights in some countries.

The occurrence of any one of these risks could harm our business or results of operations. Additionally, operating internationally requires significant management attention and financial resources. We cannot be certain that the investment and additional resources required in establishing operations in other countries will produce desired levels of revenues or profitability.

We may use third-party collaborators to help us develop, validate or commercialize any new diagnostic tests, and our ability to commercialize such tests could be impaired or delayed if these collaborations are unsuccessful.

We may license or selectively pursue strategic collaborations for the development, validation and commercialization of any new diagnostic tests we may develop. In any third-party collaboration, we would be dependent upon the success of the collaborators in performing their responsibilities and their continued cooperation. Our collaborators may not cooperate with us or perform their obligations under our agreements with them. We cannot control the amount and timing of our collaborators' resources that will be devoted to performing their responsibilities under our agreements with them. Our collaborators may choose to pursue alternative technologies in preference to those being developed in collaboration with us. The development, validation and commercialization of our potential tests will be delayed if collaborators fail to conduct their responsibilities in a timely manner or in accordance with applicable regulatory requirements or if they breach or terminate their collaboration agreements with us. Disputes with our collaborators could also impair our reputation or result in development delays, decreased revenues and litigation expenses.

Failure to achieve and maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act could cause investors to lose confidence in our operating results and in the accuracy of our financial reports and could have a material adverse effect on our business and on the price of our common stock.

As a public company in the United States, we will be required, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. We expect that our first report on compliance with Section 404 will be in connection with our financial statements for the year ending December 31, 2013.

The controls and other procedures are designed to ensure that information required to be disclosed by us in the reports that we file with the Securities and Exchange Commission, or SEC, is disclosed accurately and is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms. We are in the early stages of conforming our internal control procedures to the requirements of Section 404 and we may not be able to complete our evaluation, testing and any required remediation needed to comply with Section 404 in a timely fashion. Our independent registered public accounting firm was not engaged to perform an audit of our internal control over financial reporting for the year ended December 31, 2011 or for any other period. Our independent registered public accounting firm' s audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of our internal control over financial reporting. Accordingly, no such opinion was expressed. Even if we develop effective controls, these new controls may become inadequate because of changes in conditions or the degree of compliance with these policies or procedures may deteriorate.

Even after we develop these new procedures, material weaknesses in our internal control over financial reporting may be discovered. In order to fully comply with Section 404, we will need to retain additional employees to supplement our current finance staff, and we may not be able to so in a timely manner, or at all. In addition, in the process of evaluating our internal control over financial reporting we expect that certain of our internal control practices will need to be updated to comply with the requirements of Section 404 and the regulations promulgated thereunder, and we may not be able to do so on a timely basis, or at all. In the event that we are not able to demonstrate compliance with Section 404 in a timely manner, or are unable to produce timely or accurate financial statements, we may be subject to sanctions or investigations by regulatory authorities such as the SEC or the stock exchange on which our stock is listed, and investors may lose confidence in our operating results and the price of our common stock could decline. Furthermore, if we are unable to certify that our internal control over financial reporting is effective and in compliance with Section 404, we may be subject to sanctions or investigations by regulatory authorities such as the SEC or stock exchanges and we could lose investor confidence in the accuracy and completeness of our financial reports, which could hurt our business, the price of our common stock and our ability to access the capital markets.

If we fail to comply with the covenants and other obligations under our credit facility, the lenders may be able to accelerate amounts owed under the facility and may foreclose upon the assets securing our obligations.

In December 2012, we entered into a credit facility with Oxford Finance, or Oxford, and Square 1 Bank, or Square 1. The facility consists of $10 million in term loans from Oxford, a $6 million term loan from Square 1 and a $6 million revolving line of credit from Square 1. The term loans are payable in monthly installments of interest only through January 2014 and then principal and interest thereafter in monthly installments through July 2016. The line of credit matures in December 2013. Borrowings under our credit facility are secured by substantially all of our tangible assets. The covenants set forth in the loan and security agreement require, among other things, that we maintain a specified liquidity ratio, measured monthly, that begins at 1.25 and is reduced to 1.0 over the term of the agreement, and that we achieve minimum three-month trailing revenue levels during the term of the agreement. If we fail to comply with the covenants and our other obligations under the credit facility, the lenders would be able to accelerate the required repayment of amounts due under the loan agreement and, if they are not repaid, could foreclose upon our assets securing our obligations under the credit facility.

Our ability to use net operating losses to offset future taxable income may be subject to substantial limitations.

As of September 30, 2012, our available federal net operating losses, or NOLs, and federal research and development tax credits totaled $33.8 million. In general, under Section 382 of the Internal Revenue Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change NOLs and tax credits to offset future taxable income. We believe that we have had one or more ownership changes, as a result of which our existing NOLs are currently subject to limitation. In addition, if we undergo an ownership change in connection with or after this public offering, our ability to utilize our NOLs could be further

limited by Section 382. Future changes in our stock ownership, some of which are outside of our control, could result in additional ownership changes under Section 382. We are unable to predict the future ownership and other variables considered by, and elections available pursuant to, Section 382 for determining the usability of our net operating losses. We may not be able to utilize a material portion of our NOLs, even if we attain profitability.

Risks Related to Billing, Coverage and Reimbursement for Our Tests

Health insurers and other third-party payors may decide not to cover, or may discontinue reimbursing, our NMR LipoProfile test or any other diagnostic tests we may develop in the future, or may provide inadequate reimbursement, which could jeopardize our ability to expand our business and achieve profitability.

Our business is impacted by the level of reimbursement for our *NMR LipoProfile* test from third-party payors. In the United States, the regulatory process allows diagnostic tests to be marketed regardless of any coverage determinations made by payors. For new diagnostic tests, each third-party payor makes its own decision about which tests it will cover, how much it will pay and whether it will continue reimbursing the test. Clinicians may order diagnostic tests that are not reimbursed by third-party payors if the patient is willing to pay for the test without reimbursement, but coverage determinations and reimbursement levels and conditions are critical to the commercial success of a diagnostic product.

The Centers for Medicare and Medicaid Services, or CMS, under the U.S. Department of Health and Human Services, or HHS, establishes reimbursement payment levels and coverage rules for Medicare. CMS currently covers our *NMR LipoProfile* test. State Medicaid plans and private payors establish rates and coverage rules independently. As a result, the coverage determination process is often a time-consuming and costly process that requires us to provide scientific and clinical support for the use of our tests to each payor separately, with no assurance that coverage or adequate reimbursement will be obtained. While our test is reimbursed by a number of governmental and private payors, which we believe collectively represent approximately 150 million covered lives, there are significant large private payors who do not currently cover our test. If CMS or other third-party payors decide not to cover our diagnostic tests, place significant restrictions on the use of our tests, or offer inadequate payment amounts, our ability to generate revenue from our diagnostic tests could be limited. It is possible that the study published in the scientific journal *Circulation* in May 2012, which concluded that LDL-P and traditional cholesterol testing have similar predictive value for the incidence of CHD, although it did not address the utility of these measurements for patient management in discordant subjects, could nonetheless indirectly make it more difficult to persuade third-party payors of the benefits of our *NMR LipoProfile* over traditional cholesterol testing for patient management.

Even if one or more third-party payors decides to reimburse for our tests, that payor may reduce utilization or stop or lower payment at any time, which could reduce our revenues. For example, payment for diagnostic tests furnished to Medicare beneficiaries is made based on a fee schedule set by CMS. In recent years, payments under these fee schedules have decreased and may decrease more. We cannot predict whether or when third-party payors will cover our tests or offer adequate reimbursement to make them commercially attractive. Clinicians 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.

Billing complexities associated with obtaining payment or reimbursement for our tests may negatively affect our revenues, cash flow and profitability.

Billing for clinical laboratory testing services is complex. In cases where we do not receive a fixed fee per test performed from a laboratory customer, we perform tests in advance of payment and without certainty as to the outcome of the billing process. In cases where we do receive a fixed fee per test from a laboratory customer, we may still have disputes over pricing and billing. We or our laboratory customers receive payment from individual patients and from a variety of payors, such as commercial insurance carriers, including managed care organizations and governmental programs, primarily Medicare. Each payor typically has different billing requirements, and the billing requirements of many payors have become increasingly stringent.

Among the factors complicating our billing of third-party payors are:

- disputes among payors as to which party is responsible for payment;
- disparity in coverage among various payors;
- disparity in information and billing requirements among payors; and
- incorrect or missing billing information, which is required to be provided by the prescribing physician.

These billing complexities, and the related uncertainty in obtaining payment for our tests, could negatively affect our revenues, cash flow and profitability.

Healthcare reform measures could hinder or prevent commercial success of our NMR LipoProfile test.

In March 2010, President Obama signed into law a legislative overhaul of the U.S. healthcare system, known as the Patient Protection and Affordable Care Act of 2010, as amended by the Healthcare and Education Affordability Reconciliation Act of 2010, or the PPACA, which may have far-reaching consequences for most healthcare companies, including diagnostic companies like us. As a result of this new legislation, substantial changes could be made to the current system for paying for healthcare in the United States, including changes made in order to extend medical benefits to those who currently lack insurance coverage. The mandatory purchase of insurance is strenuously opposed by a number of state governors, resulting in lawsuits challenging the constitutionality of these provisions. On June 28, 2012, the United States Supreme Court upheld the constitutionality of these provisions of the PPACA. Congress has also proposed a number of legislative initiatives, including possible repeal of the PPACA. At this time, it remains unclear whether there will be any changes made to the PPACA, whether in part or in its entirety.

Extending coverage to a large population could substantially change the structure of the health insurance system and the methodology for reimbursing medical services, drugs and devices. These structural changes could entail modifications to the existing system of private payors and government programs, such as Medicare and Medicaid, the creation of a government-sponsored healthcare insurance source, or some combination of both, as well as other changes.

Restructuring the coverage of medical care in the United States could impact the reimbursement for diagnostic tests like ours. If reimbursement for our diagnostic tests is substantially less than we or our clinical laboratory customers expect, or rebate obligations associated with them are substantially increased, our business could be materially and adversely impacted. In addition, certain members of Congress have declared their intentions to repeal some or all of the PPACA, adding further uncertainty to the law' s future impact on us.

Regardless of the impact of the PPACA on us, the U.S. government and other governments have shown significant interest in pursuing healthcare reform and reducing healthcare costs. Any government-adopted reform measures could cause significant pressure on the pricing of healthcare products and services, including our *NMR LipoProfile* test, in the United States and internationally, as well as the amount of reimbursement available from governmental agencies or other third-party payors. The continuing efforts of the U.S. and foreign governments, insurance companies, managed care organizations and other payors to contain or reduce healthcare costs may compromise our ability to set prices at commercially attractive levels for the *NMR LipoProfile* test and other diagnostic tests that we may develop. Changes in healthcare policy, such as the creation of broad limits for diagnostic products, could substantially diminish the sale of or inhibit the utilization of future diagnostic tests, increase costs, divert management' s attention and adversely affect our ability to generate revenues and achieve consistent profitability.

New laws, regulations and judicial decisions, or new interpretations of existing laws, regulations and decisions, relating to healthcare availability, methods of delivery or payment for diagnostic products and services, or sales, marketing or pricing, may also limit our potential revenues, and we may need to revise our research and development or commercialization programs. The pricing and reimbursement environment may change in the future and become more challenging for a number of reasons, including policies advanced by the U.S.

government, new healthcare legislation or fiscal challenges faced by government health administration authorities. Specifically, in both the U.S. and some foreign jurisdictions, there have been a number of legislative and regulatory proposals and initiatives to change the healthcare system in ways that could affect our ability to sell our diagnostic tests profitably. Some of these proposed and implemented reforms could result in reduced utilization or reimbursement rates for our diagnostic products.

Risks Related to Our Proprietary Technology

We have limited patent protection for the NMR LipoProfile test and the Vantera system and may have limited patent protection for future personalized diagnostic tests that we may develop. As a result, our intellectual property position may not adequately protect us from competitors for sales of our NMR LipoProfile test, the Vantera system or any future diagnostic tests we may develop.

A significant amount of our technology, especially regarding algorithmic processes used in the *NMR LipoProfile* test, is unpatented. Additionally, the majority of the technology used in our *Vantera* system is unpatented. As a result, we are dependent to a significant degree upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position. We also rely on copyrights and trademarks and confidentiality, licenses and invention assignment agreements to protect our intellectual property rights, as well as, to a more limited extent, patents.

In an effort to protect our trade secrets, we require our employees, consultants, collaborators and advisors to execute confidentiality agreements upon the commencement of their relationships with us. These agreements require that all confidential information developed by the individual or made known to the individual by us during the course of the individual' s relationship with us be kept confidential and not disclosed to third parties. These agreements, however, may not provide us with adequate protection against improper use or disclosure of confidential information, and these agreements may be breached. Adequate remedies may not exist in the event of unauthorized use or disclosure of our confidential information. A breach of confidentiality could significantly affect our competitive position. 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 or advisors have previous employment or consulting relationships. Also, others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets.

The patent covering elements of our *NMR LipoProfile* test that we previously licensed from North Carolina State University, or NCSU, expired in August 2011. The U.S. patent we previously licensed from Siemens Medical Systems expired in 2008. We also own or co-own a number of U.S. patents and patent applications. The claims of the issued U.S. patents owned by or licensed to us, and the claims of any patents which may issue in the future and be owned by or licensed to us, may not confer on us significant commercial protection against competing diagnostic products. Third parties may challenge, narrow, invalidate or circumvent any patents we own or license currently or in the future. Also, our pending patent applications may not issue, and we may not receive any additional patents. Our patents might not contain claims that are sufficiently broad to prevent others from utilizing our technologies. Further, because of the extensive time required for development, testing and regulatory review of a potential diagnostic product, it is possible that any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantages of the patent. Similar considerations apply in any other country where we file for patent protection relating to our technology. The laws of foreign countries may preclude issuance of patents or may not protect our patent rights to the same extent as do laws of the United States.

We also hold copyrights, including copyright registrations, on documentation and software for our *NMR LipoProfile* test and have a number of registered and unregistered trademarks, including a trademark for Vantera. However, these copyrights and trademarks may not provide competitive advantages for us, and our competitors may challenge or circumvent these copyrights and trademarks. Furthermore, others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our proprietary information. In addition, the laws of some foreign countries do not protect these types of proprietary rights to the same extent as the laws of the United States.

NMR spectroscopy technology, which we use in performing our NMR analyses, is not proprietary and is known in the scientific community generally, and it is possible to duplicate the methods we use to perform our diagnostic tests. Consequently, our competitors may independently develop competing diagnostic products that do not infringe our intellectual property.

If we infringe or are alleged to infringe intellectual property rights of third parties, our business could be harmed.

Our research, development and commercialization activities, including our current *NMR LipoProfile* test and our NMR-based technology platform, as well as any other diagnostic test resulting from these activities, may infringe or be claimed to infringe patents owned by other parties. There may also be patent applications that have been filed but not published that, when issued, could be asserted against us. These third parties could bring claims against us that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us, we could be forced to stop or delay research, development, manufacturing or sales of the diagnostic product or product candidate that is the subject of the suit.

As a result of patent infringement claims, or in order to avoid potential claims, we may choose or be required to seek licenses from third parties. These licenses may not be available on acceptable terms, or at all. Even if we are able to obtain a license, the license would likely obligate us to pay license fees or royalties or both, and the rights granted to us might be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms.

There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the medical diagnostics industry. In addition to infringement claims against us, we may become a party to other patent litigation and other proceedings, including interference, derivation or post-grant proceedings declared or granted by the U.S. Patent and Trademark Office and similar proceedings in foreign countries, regarding intellectual property rights with respect to our current or future diagnostic tests or devices. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Patent litigation and other proceedings may also absorb significant management time. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could impair our ability to compete in the marketplace.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property or the patents of our licensors, which could be expensive and time-consuming.

Competitors may infringe our intellectual property, including our patents or the patents of our licensors. As a result, we may be required to file infringement claims to stop third-party infringement or unauthorized use. This can be expensive, particularly for a company of our size, and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patent claims do not cover its technology. An adverse determination of any litigation or other proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference, derivation or other proceedings brought at the U.S. Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications or those of our licensors or collaborators. Litigation or USPTO proceedings brought by us may fail or may be invoked against us by third parties. Even if we are successful, domestic or foreign litigation or USPTO or foreign patent office proceedings may result in substantial costs and distraction to our management. We may not be able, alone or with our

licensors or collaborators, to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other proceedings, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or proceedings. In addition, during the course of this kind of litigation or proceedings, there could be public announcements of the results of hearings, motions or other interim proceedings or developments or public access to related documents. If investors perceive these results to be negative, the market price for our common stock could be significantly harmed.

Risks Related to Government Regulation of Our Diagnostic Tests

If we are unable to comply with the requirements of the Clinical Laboratories Improvement Amendments of 1988 and state laws governing clinical laboratories or if we are required to expend significant additional resources to comply with these requirements, the success of our business could be threatened.

HHS has classified our *NMR LipoProfile* test as a high-complexity test under the Clinical Laboratories Improvement Amendments of 1988, commonly referred to as CLIA. Under CLIA, personnel requirements for laboratories conducting high-complexity tests are more stringent than those applicable to laboratories performing less complex tests. These personnel requirements require us to employ more experienced or more highly educated personnel and additional categories of employees, which increases our operating costs. If we fail to meet CLIA requirements, HHS or state agencies could require us to cease our *NMR LipoProfile* testing or other testing subject to CLIA that we may develop in the future. Even if it were possible for us to bring our laboratory back into compliance, we could incur significant expenses and potentially lose revenues in doing so. Moreover, new interpretations of current regulations or future changes in regulations under CLIA may make it difficult or impossible for us to comply with our CLIA classification, which would significantly harm our business.

Many states in which our physician and laboratory clients are located, such as New York, have laws and regulations governing clinical laboratories that are more stringent than federal law and may apply to us even if we are not located, and do not perform our *NMR LipoProfile* test, in that state. We may also be subject to additional licensing requirements as we expand our sales and operations into new geographic areas, which could impair our ability to pursue our growth strategy.

Portions of our NMR LipoProfile test are subject to the FDA's exercise of enforcement discretion, and any changes to the FDA's policies with respect to this exercise of enforcement discretion could hurt our business.

Clinical laboratory tests that are developed and validated by a laboratory for its own use are called laboratory-developed tests, or LDTs. The laws and regulations governing the marketing of diagnostic products for use as LDTs are extremely complex and in many instances there are no significant regulatory or judicial interpretations of these laws. For instance, while the FDA maintains that LDTs are subject to the FDA' s authority as diagnostic medical devices under the Federal Food, Drug, and Cosmetic Act, or FDCA, the FDA has generally exercised enforcement discretion and not enforced applicable regulations with respect to most tests performed by CLIA-certified laboratories.

We have obtained, FDA clearance for several of the measurements we report as part of the *NMR LipoProfile* test, specifically LDL-P, HDL-C and triglycerides, in order to support our strategy of decentralizing access to the test, which will be helpful in order to make our test commercially available for other laboratories to perform and to report patient results. The remainder of the results reported as part of our *NMR LipoProfile* test, including HDL-P, small LDL-P and LDL size, as well as a number of lipoprotein markers associated with insulin resistance and diabetes risk, are LDTs and we include them in our report on this basis. When the *Vantera* system is placed in third-party laboratories, if they elect to report these non-FDA cleared test results to their customers, we will generate the test results in our clinical laboratory using either NMR spectrum data digitally sent to us by the

third-party laboratory or a portion of the original blood sample that they send to us. This division of LDT data collection and reporting of test results has not been endorsed or approved by the FDA or other regulatory agencies, and there can be no assurance that the FDA will continue to regard these as LDTs.

In the third quarter of 2011, we submitted a 510(k) premarket notification to the FDA for HDL-P. In March 2012, we voluntarily withdrew that submission and have since worked with the FDA outside of the formal review process to resolve issues identified by the FDA with respect to our submission. Specifically, the FDA raised concerns relating to two clinical studies from which we acquired specimens that we tested to produce data in support of our application. Both studies were conducted by other sponsors and involved large populations. In one case, the FDA expressed concern that the subjects of the study were initially evaluated in the early 1990s and, more specifically, that the specimens were too old and the criteria used to determine a cardiovascular event during that time period were no longer representative of current medical practice. In the second case, the FDA expressed the concern that, because we could only use specimens from the group of subjects who had previously given permission to use their results for commercial purposes, it was possible that this portion of the study population was not representative of the entire population and the results may therefore have been biased.

We resubmitted the 510(k) premarket notification to the FDA, seeking clearance of the HDL-P test, in December 2012. This submission was based on data derived from specimens both from a more recent large, third-party clinical study, as well as the complete data set from the study for which FDA had been concerned with bias. We believe these revisions will address the concerns previously expressed by the FDA. However, there can be no assurance that we will obtain clearance for this LDT. We have not yet sought FDA clearance for any other LDTs but currently intend to do so for some of these non-cleared portions of our test. In the event we were to not receive clearance for HDL-P or these other tests, we would plan to continue to offer them as LDTs.

The regulation of diagnostic tests classified as LDTs may become more stringent in the future. The FDA held a meeting in July 2010 during which it indicated that it intends to reconsider its current policy of enforcement discretion and to begin drafting an oversight framework for LDTs. We cannot predict the extent of the FDA' s future regulation and policies with respect to LDTs and there can be no assurance that the FDA will not require us to obtain premarket clearance or approval for some or all of the non-FDA cleared portions of our *NMR LipoProfile* test report. If the FDA imposes significant changes to the regulation of LDTs, or if Congress were to pass legislation that more actively regulates LDTs and *in vitro* diagnostic tests, it could restrict our ability to provide the portions of our test that are not cleared by the FDA or potentially delay the launch of future tests.

While we believe that we are currently in material compliance with applicable laws and regulations relating to LDTs and we believe that our provision of these second-page results to the third-party laboratories utilizing the *Vantera* system will continue to be regarded as LDTs, we cannot assure you that the FDA or other regulatory agencies would agree with our determination, and a determination that we have violated these laws, or a public announcement that we are being investigated for possible violation of these laws, could hurt our business and our reputation. A significant change in any of these laws, or the FDA' s interpretation of the scope of its enforcement discretion, may also require us to change our business model in order to maintain compliance with these laws.

If we are unable to obtain the required clearance of the currently non-cleared portions of our test from the FDA, third-party clinical diagnostic laboratories may be less willing to accept the Vantera system in their facilities.

In December 2011, we submitted a new 510(k) premarket notification for the *Vantera* system without a site restriction, and in August 2012 we received FDA clearance to market our *Vantera* system commercially to laboratories. We currently expect to begin placing the *Vantera* system in third-party clinical diagnostic laboratory facilities in the first quarter of 2013, which we believe will faciliate their ability to offer our *NMR LipoProfile* test and other personalized diagnostic tests that we may develop.

In the third quarter of 2011, we submitted a 510(k) premarket notification to the FDA seeking clearance of the HDL-P test, as performed on our current NMR-based clinical analyzer platform. In March 2012, the FDA notified us that there were issues with our 510(k) submission that will need to be resolved prior to FDA clearance. We voluntarily withdrew our submission and have since worked with the FDA outside of the formal review process to resolve those issues. We resubmitted our 510(k) premarket notification to the FDA in December 2012, seeking clearance of the HDL-P test as performed on our current generation clinical analyzers or using the *Vantera* system, with a goal of having the HDL-P test cleared by the FDA in 2013. We also intend to submit some of the other currently non-cleared test measurements to the FDA for 510(k) clearance in the first half of 2013.

If FDA clearance or approval of the non-cleared portions of our test is delayed or does not occur, clinical diagnostic laboratories may be less willing to accept the *Vantera* system in their facilities. Historically, many of our customers have valued the results from the non-FDA cleared portions of our test. Once the *Vantera* system is placed in third-party laboratories, at the option of the third-party laboratories, we will still make the second-page test results available to them at no additional charge for dissemination along with the first-page results. We will generate these second-page results in our clinical laboratory using either NMR spectrum data digitally sent to us by the third-party laboratory or a portion of the original blood sample that they send to us. We will then send the second-page results back to the third-party laboratories, which will report them to their customer along with the first-page results. Third-party laboratories utilizing the *Vantera* system may find the options for receiving the non-cleared portions of our test report unacceptable, which may result in less use or adoption of the *Vantera* system by third-party laboratories, or less willingness to accept the placement of the *Vantera* system in their facilities in the first place.

In addition, our *NMR LipoProfile* test report would continue to include a disclaimer that any non-cleared portions of tests had not been cleared by the FDA and that the clinical utility of such results had not been fully established. Furthermore, even if we do obtain FDA clearance for the currently non-cleared portions of our test, new premarket submissions for any modifications or enhancements we later make to such test, or to the *Vantera* system, that could significantly affect safety or effectiveness, or constitute a major change in the intended use of the test or the *Vantera* system, would be required. We cannot be sure that clearance of a new 510(k) notification would be granted on a timely basis, or at all, or that FDA clearance processes will not involve costs and delays that could adversely affect our ability to pursue our growth strategy.

The NMR LipoProfile test is, and any other test for which we obtain marketing clearance or approval will be, subject to extensive ongoing regulatory requirements, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products.

Any test or medical device for which we obtain marketing clearance or approval, including the *Vantera* system that received FDA clearance in August 2012, along with the manufacturing processes, labeling, advertising and promotional activities for such test or device, will be subject to continual requirements of, and review by, the FDA and comparable regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, requirements relating to quality control, quality assurance and corresponding maintenance of records and documents, requirements relating to product labeling, advertising and promotion, and recordkeeping. Even if regulatory approval of a test or device is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to other conditions of approval. In addition, approval may contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the test or device. Discovery after approval of previously unknown problems with our tests, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in actions such as:

- restrictions on manufacturing processes;
- restrictions on marketing of a test;

restrictions on distribution;

warning letters;

withdrawal of the test from the market;

refusal to approve pending applications or supplements to approved applications that we submit;

recall of tests;

fines, restitution or disgorgement of profits or revenue;

suspension or withdrawal of regulatory approvals;

refusal to permit the import or export of our products;

product seizure;

injunctions; or

imposition of civil or criminal penalties.

Our business is subject to other complex and sometimes unpredictable government regulations. If we or any of our clinical diagnostic laboratory customers fail to comply with these regulations, we could incur significant fines and penalties.

As a provider of clinical diagnostic testing products and services, we are subject to extensive and frequently changing federal, state and local laws and regulations governing various aspects of our business. In particular, the clinical laboratory industry is subject to significant governmental certification and licensing regulations, as well as federal and state laws regarding:

test ordering and billing practices;

marketing, sales and pricing practices;

health information privacy and security, including the Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and comparable state laws;

insurance;

anti-markup legislation; and

consumer protection.

We are also required to comply with FDA regulation of our manufacturing practices and adverse event reporting activities, and regulation by the FDA of our labeling and promotion activities. In addition, advertising of our tests is subject to regulation by the Federal Trade Commission, or FTC, under the Federal Trade Commission Act, or FTC Act. Violation of any FDA requirement could result in enforcement actions, such as seizures, injunctions, civil penalties and criminal prosecutions, and violation of the FTC Act could result in injunctions and other associated remedies, all of which could have a material adverse effect on our business. Most states also have similar postmarket regulatory and enforcement authority for devices. Additionally, most foreign countries have authorities comparable to the FDA and processes for obtaining marketing approvals. Obtaining and maintaining these approvals, and complying with all laws and regulations, may subject us to similar risks and delays as those we could experience under FDA and FTC regulation. We incur various costs in complying and overseeing compliance with these laws and regulations.

We are unable to predict what additional federal or state legislation or regulatory initiatives may be enacted in the future regarding our business or the healthcare industry in general, or what effect such legislation or regulations may have on us. Federal or state governments may impose additional restrictions or adopt interpretations of

existing laws that could have a material adverse effect on us. If we fail to comply with any existing or future regulations, restrictions or interpretations, we could incur significant fines and penalties.

If we or any of our clinical diagnostic laboratory customers are subject to an enforcement action involving false claims, kickbacks, physician self-referral or other federal or state fraud and abuse laws, we could incur significant civil and criminal sanctions and loss of reimbursement, which would hurt our business.

The government has made enforcement of the false claims, anti-kickback, physician self-referral and various other fraud and abuse laws a major priority. In many instances, private whistleblowers also are authorized to enforce these laws even if government authorities choose not to do so. Several clinical diagnostic laboratories and members of their management have been the subject of this enforcement scrutiny, which has resulted in very significant civil and criminal settlement payments. In most of these cases, private whistleblowers brought the allegations to the attention of federal enforcement agencies. The risk of our being found in violation of these laws and regulations is increased by the fact that some of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. These laws include:

- the federal Anti-Kickback Statute, which constrains our marketing practices, educational programs, pricing policies, and relationships with health care providers or other entities, by prohibiting, among other things, soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal health care program, such as the Medicare and Medicaid programs;

- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent;

- federal physician self-referral laws, such as the Stark law, which prohibit a physician from making a referral to a provider of certain health services with which the physician or the physician' s family member has a financial interest, and prohibit submission of a claim for reimbursement pursuant to a prohibited referral; and

- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payer, including commercial insurers, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

If we or our operations are found to be in violation of any of these laws and regulations, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in U.S. federal or state health care programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. We monitor our own compliance with federal and state fraud and abuse laws on an ongoing basis. However, we do not monitor the compliance of our clinical diagnostic laboratory customers with federal and state fraud and abuse laws. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses, divert our management' s attention from the operation of our business and hurt our reputation. If we were excluded from participation in U.S. federal health care programs, we would not be able to receive, or to sell our tests to other parties who receive, reimbursement from Medicare, Medicaid and other federal programs. Any similar penalties imposed upon our laboratory customers could also materially harm our revenues and our reputation.

Our compliance program has not eliminated all risks related to these laws. In 2011, our general counsel became aware of a practice engaged in by our sales force that potentially implicated the fraud and abuse laws. The practice involved giving gift cards in small denominations, typically $25, to staff in doctors' offices or to employees of our laboratory partners. We do not believe that gift cards were given to the doctors actually ordering our test except in a single case. Since 2005, the total value of gift cards distributed by the sales force was approximately $100,000. After our general counsel learned of this practice, we stopped it. The audit

committee of our board of directors later hired outside counsel to conduct an internal investigation of the matter. The investigation concluded that there was no evidence of willful wrongdoing by any of our employees, but did conclude that our internal policies and communications provided inconsistent guidance on the use of gift cards. We have subsequently revised our internal policies to eliminate any inconsistencies, and we have been taking and are continuing to take additional steps to strengthen our compliance activities. Among other things, we have adopted a new policy on interactions with healthcare professionals, which is based on the Code of Ethics on Interactions with Health Care Professionals promulgated by the Advanced Medical Technology Association, or AdvaMed, a leading medical technology association.

In late 2011, we decided to voluntarily disclose the gift card issue to the local office of the U.S. Attorney. In December 2011, our counsel disclosed this matter on our behalf to the U.S. Attorney' s Office in Raleigh, North Carolina, or the USAO. After various meetings and communications between our counsel and the USAO, the USAO notified us in writing in March 2012 that, based on the information provided by our counsel, it had closed its file without investigation and did not intend to take further action in this matter.

Following our receipt of the notification from the USAO, we made a voluntary disclosure of this matter in April 2012 under the formal self-disclosure protocol established by the Office of Inspector General of HHS, or the OIG. Although we do not believe that we violated any laws, we recognized that our conduct potentially implicated the fraud and abuse laws and we decided to voluntarily make the OIG submission to resolve any potential liability. On July 5, 2012, we entered into a settlement agreement with the OIG to settle this matter for a payment of approximately $150,000. We neither admitted nor denied any wrongdoing in connection with this settlement.

In June 2012 we were informed by attorneys with the Civil Division of the U.S. Department of Justice and the U.S. Attorney' s Office for the District of South Carolina, which we refer to collectively as the DOJ, that they were conducting a civil investigation of allegations that we defrauded federal healthcare programs, including allegations that we paid kickbacks to physicians and submitted claims to federal healthcare programs for medically unnecessary lab tests. We believe that this investigation also involves at least one other cardiovascular diagnostics company and likely arose out of a whistleblower action filed under the federal False Claims Act, which permits any individual who purports to have knowledge that false or fraudulent claims have been submitted for government funds to bring suit on behalf of the United States. Such matters are required to be filed under seal and typically are investigated by the DOJ to determine whether it will intervene in the case on behalf of the government.

We have cooperated with the DOJ' s investigation, including by responding to an extensive document request and by initiating a detailed presentation to representatives of the DOJ on the full range of our financial relationships with health care professionals and on our test ordering forms and procedures. In correspondence to our counsel dated October 19, 2012, the Acting Director of the Fraud Section of DOJ' s Civil Division, the office handling the DOJ' s investigation, advised us that the Civil Division of the DOJ does not have any present intention, based on facts now known, to pursue further the investigation of our company and/or to file or join suit against us based on the allegations that initiated the investigation, and that we do not need to produce additional documents or information. The DOJ has further advised our counsel that additional action to close the matter publicly should not be expected in the near term, however, because the government' s broader investigation, apparently of other parties, will continue for an indefinite period, which we believe is not uncommon in cases involving multiple parties.

Although we believe that we are in compliance in all material respects with applicable laws and regulations, there can be no assurance that new information will not come to light that would cause the DOJ to resume its investigation with respect to us. The DOJ letter did make clear that it does not preclude actions by agencies or agents of the United States, including the DOJ, to pursue overpayment or recoupment actions of any sort, contract actions, or any other type of legal action, which we are advised by our counsel is language typically

included in letters of this type. In addition, if this matter was in fact initiated by a whistleblower under the False Claims Act, then even if the government ultimately declines to intervene and take over the case, the whistleblower has the right under the False Claims Act to conduct the action. Moreover, we cannot assure you that we will not become subject to similar government inquiries, investigations or actions in the future. Any finding of noncompliance by us with applicable laws and regulations could subject us to a variety of penalties and other sanctions as discussed above, the imposition of any of which could have a material adverse effect on us and our business. In addition, whether or not we are found to be in non-compliance with any applicable laws, we could incur significant expense in responding to or resolving any such inquiries, investigations or actions and we could be required to modify our business practices in a way that adversely affects our business.

Failure to obtain regulatory approval in international jurisdictions would prevent us from marketing products abroad, including our NMR LipoProfile test, the Vantera system and any new diagnostic tests we may develop.

We may in the future seek to market our *NMR LipoProfile* test, and potentially the *Vantera* system and any new diagnostic tests we may develop, outside the United States. In order to market these products in the European Union and many other jurisdictions, we must submit clinical data and comparative effectiveness data concerning our products and obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional clinical testing. The time required to obtain approval from foreign regulators may be longer than the time required to obtain FDA approval. The regulatory approval process outside the United States may include all of the risks associated with obtaining FDA approval.

In addition, in many countries outside the United States, it is required that our tests be approved for reimbursement before they can be approved for sale in that country. In some cases this may include approval of the price we intend to charge for our products, if approved. We may not obtain approvals from regulatory authorities outside the United States on a timely basis, or at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA, but a failure to obtain, or a delay in obtaining, regulatory approval in one country may negatively affect the regulatory process in other countries. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize any tests in any market and therefore may not be able to pursue these revenue opportunities.

Risks Related to this Offering and Our Common Stock

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock will be determined through negotiations with the underwriters and may bear no relationship to the price at which the common stock will trade upon completion of this offering. Some of our existing stockholders and their affiliated entities, including holders of more than 5% of our common stock, have indicated an interest in purchasing up to an aggregate of $3.4 million in shares of our common stock in this offering at the initial public offering price. To the extent these existing stockholders are allocated and purchase shares in this offering, such purchases would reduce the available public float for our shares because these stockholders will be restricted from selling the shares by restrictions under applicable securities laws and the lock-up agreements described in the “Shares Eligible for Future Sale” and “Underwriting” sections of this prospectus. As a result, the liquidity of our common stock could be significantly reduced from what it would have been if these shares had been purchased by investors that were not affiliated with us. Although we have applied to have our common stock listed on The NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, it may be difficult for you to sell the shares you purchase in this offering without depressing the market price for the common stock or to sell your shares at all.

The trading price of our common stock is likely to be volatile, and purchasers of our common stock could incur substantial losses.

Our stock price is likely to be volatile. The stock market in general and the market for diagnostic companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including:

- regulatory or legal developments in the United States and foreign countries;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- announcements by us of significant acquisitions, licenses, strategic partnerships, joint ventures or capital commitments;
- market conditions in the diagnostic sector and issuance of securities analysts' reports or recommendations;
- sales of substantial amounts of our stock by insiders and large stockholders, or the expectation that such sales might occur;
- general economic, industry and market conditions;
- additions or departures of key personnel;
- intellectual property, product liability or other litigation against us;
- expiration or termination of our potential relationships with customers and strategic partners; and
- the other factors described in this "Risk Factors" section.

In addition, in the past, stockholders have initiated class action lawsuits against clinical diagnostics companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management' s attention and resources.

If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline.

Equity research analysts do not currently provide research coverage of our common stock, and we cannot assure you that any equity research analysts will provide research coverage of our common stock after the completion of this offering. In particular, as a smaller company, it may be difficult for us to attract the interest of equity research analysts. A lack of research coverage may adversely affect the liquidity of and market price of our common stock. To the extent we obtain equity research analyst coverage, we will not have any control of the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

If you purchase shares of our common stock in this offering, you will suffer immediate dilution of your investment.

We expect the initial public offering price of our common stock to be substantially higher than the pro forma net tangible book value per share of our common stock after this offering. Based on an assumed initial public offering price of $14.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of $8.57 per share, representing the difference between our pro forma as adjusted net tangible book value per share after giving effect to this offering and the assumed initial public offering price.

In addition, as of December 31, 2012, we had outstanding stock options to purchase an aggregate of 2,056,848 shares of common stock at a weighted-average exercise price of $5.56 per share and outstanding warrants to purchase an aggregate of 85,430 shares of our common stock, after giving effect to the conversion of preferred stock issuable upon the exercise of the warrants to common stock upon completion of this offering, at an exercise price of $8.97 per share. To the extent these outstanding options and warrants are exercised, there will be further dilution to investors in this offering.

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. If our stockholders sell, or the market perceives that our stockholders intend to sell, substantial amounts of our common stock in the public market following this offering, the market price of our common stock could decline significantly.

Upon completion of this offering, we will have outstanding 13,888,795 shares of common stock, assuming no exercise of outstanding options or warrants. Of these shares, the 5,000,000 shares sold in this offering and 772,291 additional shares will be freely tradable, 26,364 additional shares of common stock will be eligible for sale in the public market beginning 90 days after the date of this prospectus, subject to volume, manner of sale and other limitations of Rule 144 and Rule 701, and 8,090,140 additional shares of common stock will be available for sale in the public market beginning 180 days after the date of this prospectus following the expiration of lock-up agreements between some of our stockholders and the underwriters. The representatives of the underwriters may release these stockholders from their lock-up agreements with the underwriters at any time and without notice, which would allow for earlier sales of shares in the public market.

In addition, promptly following the completion of this offering, we intend to file one or more registration statements on Form S-8 registering the issuance of approximately 3.3 million shares of common stock subject to options or other equity awards issued or reserved for future issuance under our equity incentive plans. Shares registered under these registration statements on Form S-8 will be available for sale in the public market subject to vesting arrangements and exercise of options, the lock-up agreements described above and the restrictions of Rule 144 in the case of our affiliates.

Additionally, after this offering, the holders of an aggregate of approximately 7.1 million shares of our common stock, including shares of our common stock issuable upon the exercise of outstanding warrants, or their transferees, will have rights, subject to some conditions, to require us to file one or more registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. Once we register the issuance of these shares, they can be freely sold in the public market. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Provisions in our corporate charter documents and under Delaware law may prevent or frustrate attempts by our stockholders to change our management and hinder efforts to acquire a controlling interest in us, and the market price of our common stock may be lower as a result.

There are provisions in our certificate of incorporation and bylaws as they will be in effect following this offering, that may make it difficult for a third party to acquire, or attempt to acquire, control of our company, even if a change in control was considered favorable by you and other stockholders. For example, our board of directors will have the authority to issue up to 5,000,000 shares of preferred stock. The board of directors can fix the price, rights, preferences, privileges, and restrictions of the preferred stock without any further vote or action by our stockholders. The issuance of shares of preferred stock may delay or prevent a change in control transaction. As a result, the market price of our common stock and the voting and other rights of our stockholders may be adversely affected. An issuance of shares of preferred stock may result in the loss of voting control to other stockholders.

Our charter documents will also contain other provisions that could have an anti-takeover effect, including:

- only one of our three classes of directors will be elected each year;
- stockholders will not be entitled to remove directors other than by a 66 2/3% vote and only for cause;
- stockholders will not be permitted to take actions by written consent;
- stockholders cannot call a special meeting of stockholders; and
- stockholders must give advance notice to nominate directors or submit proposals for consideration at stockholder meetings.

In addition, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which regulates corporate acquisitions. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that certain investors are willing to pay for our stock.

Our amended and restated certificate of incorporation will also provide that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Upon completion of this offering, our executive officers, directors and current beneficial owners of 5% or more of our common stock and their respective affiliates will, in aggregate, beneficially own approximately 46% of our outstanding common stock, assuming no participation in the offering by these stockholders. These persons, acting together, would be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors and any merger or other significant corporate transactions. The interests of this group of stockholders may not coincide with the interests of other stockholders. In addition, some of the current holders of our convertible preferred stock and their affiliated entities have indicated an interest in purchasing up to an aggregate of $3.4 million in shares of our common stock in this offering at the initial public offering price. To the extent these existing stockholders are allocated and purchase shares in this offering, the concentration of voting power in our executive officers, directors and current holders of our convertible preferred stock would increase beyond the percentage indicated in this paragraph, which may negatively impact the liquidity of our common stock.

We will have broad discretion in the use of proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return.

We will have broad discretion over the use of proceeds from this offering. You may not agree with our decisions, and our use of the proceeds may not yield any return on your investment in us. Our failure to apply the net proceeds of this offering effectively could impair our ability to pursue our growth strategy or could require us to raise additional capital.

We may need to raise additional capital after this offering, and if we cannot raise additional capital when needed, we may have to curtail or cease operations.

We cannot assure you that the proceeds of this offering will be sufficient to fully fund our business and growth strategy. We may need to raise additional funds through public or private equity or debt financing to continue to fund or expand our operations.

Our actual liquidity and capital funding requirements will depend on numerous factors, including:

- the extent to which our tests, including the *NMR LipoProfile* test and other tests under development, are successfully developed, gain regulatory clearance and market acceptance and become and remain competitive;

our ability to obtain more extensive reimbursement for our tests;

our ability to collect our accounts receivable;

the costs and timing of further expansion of our sales and marketing activities and research and development activities; and

the timing and results of any regulatory approvals that we are required to obtain for our diagnostic tests.

Additional capital, if needed, may not be available on satisfactory terms, or at all. Furthermore, any additional capital raised through the sale of equity will dilute your ownership interest in us and may have an adverse effect on the price of our common stock. In addition, the terms of the financing may adversely affect your holdings or rights. Debt financing, if available, may include restrictive covenants.

If we are not able to obtain adequate funding when needed, we may have to delay development or commercialization of our diagnostic tests or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize ourselves. We also may have to reduce research and development, sales and marketing, customer support or other expenses. Any of these outcomes could harm our business.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gains.

We have not declared or paid cash dividends on our common stock to date. We currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the terms of any existing or future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

We will incur costs and demands upon management as a result of complying with the laws and regulations affecting public companies in the United States, which may adversely affect our operating results.

As a public company listed in the United States, we will incur significant additional legal, accounting and other expenses. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the SEC and NASDAQ, may increase legal and financial compliance costs and make some activities more time consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management' s time and attention from revenue-generating activities to compliance activities. If notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain certain types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors or as members of senior management.

We are an "emerging growth company," and if we decide to comply only with reduced disclosure requirements applicable to emerging growth companies, our common stock could be less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012, and, for as long as we continue to be an "emerging growth company," we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not

to "emerging growth companies," including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an "emerging growth company" through 2018, although a variety of circumstances could cause us to lose that status earlier, including if the market value of our common stock held by non-affiliates exceeds $700 million as of any June 30 before that time, in which case we would no longer be an emerging growth company as of the following December 31. We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies that become public can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards following the completion of this offering and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections entitled "Prospectus Summary," "Risk Factors," "Management' s Discussion and Analysis of Financial Condition and Results of Operations" and "Business," but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by the words "may," "might," "will," "could," "would," "should," "expect," "intend," "plan," "objective," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue" and "ongoing," or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. Forward-looking statements include statements about:

- our expectation that, for the foreseeable future, substantially all of our revenues will be derived from the *NMR LipoProfile* test;
- future demand for our *NMR LipoProfile* test and future tests, if any, that we may develop;
- the factors that we believe drive demand for our *NMR LipoProfile* test and our ability to sustain such demand;
- the size of the market for our *NMR LipoProfile* test;
- our plans for the *Vantera* system and our expectations about deploying it on-site in third-party clinical diagnostic laboratories and the timing of its commercial availability;
- the potential clearance by the FDA of our HDL-P test pursuant to our 510(k) premarket notification and the timing thereof;
- the timing of our submissions of other non-cleared portions of our *NMR LipoProfile* test to the FDA for clearance;
- the potential impact resulting from any regulation of our *NMR LipoProfile* test or future tests, if any, that we may develop, by the FDA or any other regulation of our business or any regulatory proceedings to which we may be subject from time to time;
- our plans for pursuing coverage and reimbursement for our *NMR LipoProfile* test, and any changes in reimbursement affecting our business;
- the ability of our *NMR LipoProfile* test to impact treatment decisions;
- plans for future diagnostic tests;
- the capacity of our laboratory to process our *NMR LipoProfile* test;
- our anticipated use of the net proceeds of this offering;
- our plans for executive and director compensation for the future;
- our anticipated cash needs and our estimates regarding our capital requirements and our needs for additional financing;
- anticipated trends and challenges in our business and the market in which we operate; and
- the expected level of insider participation, if any, in this offering.

You should refer to the "Risk Factors" section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements.

As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of 5,000,000 shares of our common stock in this offering will be approximately $61.6 million, or approximately $71.4 million if the underwriters exercise their over-allotment option in full, based upon an assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each $1.00 increase or decrease in the assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, would increase or decrease the net proceeds to us from this offering by approximately $4.7 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase or decrease of 1,000,000 in the number of shares we are offering would increase or decrease the net proceeds to us from this offering, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, by approximately $13.0 million, assuming the assumed initial public offering price stays the same. We do not expect that a change in the offering price or the number of shares by these amounts would have a material effect on our intended uses of the net proceeds from this offering, although it may impact the amount of time prior to which we may need to seek additional capital.

We currently expect to use the net proceeds from this offering as follows:

- $5.2 million upon the closing of this offering to pay dividends on the outstanding shares of Series F redeemable convertible preferred stock that will convert into common stock;
- approximately $22.6 million to hire additional sales and marketing personnel and to support costs associated with increased sales and marketing activities;
- approximately $18.0 million for capital expenditures, including components of the *Vantera* system and other improvements to our laboratory infrastructure;
- approximately $4.8 million to fund our research and development programs, including the expansion of our diagnostic test menu based on the *Vantera* system; and
- the balance for other general corporate purposes, including general and administrative expenses, working capital and the potential repayment of indebtedness.

In addition, we may use a portion of the net proceeds from this offering to acquire, invest in or license complementary products, technologies or businesses, but we currently have no agreements or commitments with respect to any potential acquisition, investment or license. We may allocate funds from other sources to fund some or all of these activities.

The expected use of net proceeds from this offering represents our intentions based upon our present plans and business conditions.

Pending their use, we intend to invest the net proceeds of this offering in a variety of capital-preservation investments, including short- and intermediate-term, interest-bearing, investment-grade securities.

DIVIDEND POLICY

We have never declared or paid any dividends on our common stock. We anticipate that we will retain all of our future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying cash dividends in the foreseeable future. Additionally, our ability to pay dividends on our common stock is limited by restrictions on our ability to pay dividends or make distributions, including restrictions under the terms of the agreements governing our credit facility.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2012:

- on an actual basis;
- on a pro forma basis to give effect to:
  - the conversion of the outstanding shares of our convertible preferred stock into an aggregate of 6,985,817 shares of our common stock, which will occur automatically upon the closing of this offering;
  - the payment of $5.2 million of accrued dividends on the outstanding shares of Series F redeemable convertible preferred stock that will convert into common stock upon the closing of this offering; and
  - the reclassification of the preferred stock warrant liability to additional paid-in-capital upon conversion of the preferred stock issuable upon exercise of such warrants into common stock; and
- on a pro forma as adjusted basis to give further effect to our sale of 5,000,000 shares of common stock in this offering at an assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	As of September 30, 2012		
	Actual	Pro forma	Pro forma as adjusted
		(in thousands)	
Cash and cash equivalents	$10,279	$5,079	$69,335
Revolving line of credit[1]	$3,500	$3,500	$3,500
Current maturities of long-term debt[1]	2,400	2,400	2,400
Long-term debt, less current maturities[1]	1,800	1,800	1,800
Preferred stock warrant liability	462	–	–
Series D redeemable convertible preferred stock, $0.001 par value; 3,544,062 shares designated, 500,408 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	2,612	–	–
Series D-1 redeemable convertible preferred stock, $0.001 par value; 3,480,473 shares designated, 2,980,065 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	15,556	–	–
Series E redeemable convertible preferred stock, $0.001 par value; 5,059,330 shares designated, 4,718,752 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	20,795	–	–
Series F redeemable convertible preferred stock, $0.001 par value; 3,118,678 shares designated, 2,988,506 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	18,200	–	–
Stockholders' (deficit) equity:			
Series A convertible preferred stock, $0.001 par value; 300,000 shares designated, 229,088 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	0	–	–
Series A-1 convertible preferred stock, $0.001 par value; 252,700 shares designated, 23,612 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	0	–	–

Series B convertible preferred stock, $0.001 par value; 166,667 shares designated, 154,536 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	0	–	–
Series B-1 convertible preferred stock, $0.001 par value; 159,536 shares designated, 5,000 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	0	–	–

(1) Subsequent to September 30, 2012, we refinanced our indebtedness. As of December 31, 2012, our indebtedness consisted of $16.0 million in term loans, all of which was classified as long-term on our balance sheet, and $5.0 million borrowed under our revolving line of credit, all of which was classified as current liabilities on our balance sheet.

	As of September 30, 2012		
	Actual	Pro forma	Pro forma as adjusted
		(in thousands)	
Series C convertible preferred stock, $0.001 par value; 1,275,000 shares designated, 1,022,595 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	1	–	–
Series C-1 convertible preferred stock, $0.001 par value; 1,274,774 shares designated, 252,179 shares issued and outstanding, actual; no shares designated, issued or outstanding, pro forma and pro forma as adjusted	–	–	–
Preferred stock, $0.001 per share; no shares authorized, issued or outstanding, actual or pro forma; 5,000,000 shares authorized, no shares issued or outstanding, pro forma as adjusted	–	–	–
Common stock, $0.001 par value; 90,000,000 shares authorized, 1,707,260 shares issued and outstanding, actual; 90,000,000 shares authorized, 8,693,078 shares issued and outstanding, pro forma; 75,000,000 shares authorized, 13,693,078 shares issued and outstanding, pro forma as adjusted	4	9	14
Additional paid-in-capital	9,087	61,508	125,759
Accumulated deficit	(48,186)	(48,186)	(48,186)
Total stockholders' (deficit) equity	(39,094)	13,331	77,587
Total capitalization	$26,231	$21,031	$85,287

The pro forma as adjusted information set forth above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, would increase or decrease pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by approximately $4.7 million assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase or decrease of 1,000,000 in the number of shares we are offering would increase or decrease each of pro forma as adjusted additional paid-in capital, stockholders' equity and total capitalization by approximately $13.0 million, assuming the assumed initial public offering price per share, which is the midpoint of the range set forth on the cover page of this prospectus, remains the same.

The number of shares of common stock outstanding in the table above does not include:

2,375,803 shares of our common stock issuable upon the exercise of stock options outstanding under our 1997 stock option plan and 2007 stock incentive plan as of September 30, 2012, at a weighted average exercise price of $4.88 per share;

69,821 shares of our common stock issuable upon the exercise of outstanding warrants as of September 30, 2012, at an exercise price of $8.97 per share; and

1,212,500 shares of our common stock to be reserved for future issuance under our equity incentive plans.

DILUTION

If you invest in our common stock in this offering, your interest will be diluted to the extent of the difference between the initial public offering price per share and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering. Net tangible book value per share is determined by dividing our total tangible assets less total liabilities and redeemable convertible preferred stock by the number of outstanding shares of our common stock.

As of September 30, 2012, we had a deficit in net tangible book value of $(42.5) million, or approximately $(24.91) per share of common stock. On a pro forma basis, after giving effect to the conversion of the outstanding shares of our convertible preferred stock into shares of our common stock, the payment of accrued dividends on the outstanding shares of Series F redeemable convertible preferred stock and the reclassification of the preferred stock warrant liability to equity immediately prior to the closing of this offering, our net tangible book value would have been approximately $9.9 million, or approximately $1.14 per share of common stock.

Investors participating in this offering will incur immediate and substantial dilution. After giving effect to the issuance and sale of 5,000,000 shares of our common stock in this offering at an assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2012 would have been approximately $74.3 million, or approximately $5.43 per share of common stock. This represents an immediate increase in the pro forma net tangible book value of $4.29 per share to existing stockholders, and an immediate dilution in the pro forma net tangible book value of $8.57 per share to investors purchasing shares of our common stock in this offering. The following table illustrates this per share dilution:

Assumed initial public offering price per share		$14.00
Actual deficit in net tangible book value per share as of September 30, 2012	$(24.91)	
Increase per share attributable to conversion of preferred stock, payment of accrued dividends and reclassification of preferred stock warrant liability	26.05	
Pro forma net tangible book value per share before this offering	1.14	
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering	4.29	
Pro forma as adjusted net tangible book value per share after this offering		5.43
Dilution per share to investors participating in this offering		$8.57

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $14.00 per share would increase or decrease our pro forma as adjusted net tangible book value by approximately $4.7 million, or approximately $0.34 per share, and the dilution per share to investors participating in this offering by approximately $0.66 per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase or decrease of 1,000,000 in the number of shares we are offering would increase or decrease our pro forma as adjusted net tangible book value as of September 30, 2012 after this offering by approximately $13.0 million, or approximately $0.41 per share, assuming the assumed initial public offering price per share remains the same, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option in full to purchase 750,000 additional shares of common stock in this offering, the pro forma as adjusted net tangible book value per share after the offering would be $5.82 per share, the increase in the pro forma net tangible book value per share to existing stockholders would be $4.68 per share and the dilution to new investors purchasing common stock in this offering would be $8.18 per share.

The following table sets forth as of September 30, 2012, on the pro forma basis described above, the differences between the number of shares of common stock purchased from us, the total consideration paid and the weighted average price per share paid by existing stockholders and by investors purchasing shares of our common stock in this offering at an assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page on this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares purchased		Total consideration		Weighted average price per share
	Number	Percent	Amount	Percent	
Existing stockholders	8,693,078	63 %	$59,820,514	46 %	$ 6.88
New investors	5,000,000	37	70,000,000	54	14.00
Total	13,693,078	100 %	$129,820,514	100 %	

If the underwriters exercise their option to purchase additional shares in full, the common stock held by existing stockholders will be reduced to 60% of the total number of shares of common stock outstanding after this offering, and the number of shares of common stock held by investors participating in this offering will be increased to 5,750,000 shares, or 40% of the total number of shares of common stock outstanding after this offering.

Each $1.00 increase or decrease in the assumed initial public offering price of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by $5.0 million, and increase or decrease the percent of total consideration paid by new investors by 3.9 percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same.

The table above excludes:

- 2,375,803 shares of our common stock issuable upon the exercise of stock options outstanding under our 1997 stock option plan and 2007 stock incentive plan as of September 30, 2012, at a weighted average exercise price of $4.88 per share;
- 69,821 shares of our common stock issuable upon the exercise of outstanding warrants as of September 30, 2012, at an exercise price of $8.97 per share; and
- 1,212,500 shares of our common stock to be reserved for future issuance under our equity incentive plans.

To the extent that options or warrants are exercised, new options are issued under our equity benefit plans, or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

Some of our existing stockholders and their affiliated entities, including holders of more than 5% of our common stock, have indicated an interest in purchasing up to an aggregate of $3.4 million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing stockholders and any of these existing stockholders could determine to purchase more, less or no shares in this offering. The foregoing discussion and tables do not reflect any potential purchases by these existing stockholders or their affiliated entities.

SELECTED FINANCIAL DATA

You should read the following selected financial data together with "Management' s Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and accompanying notes included later in this prospectus. The selected financial data in this section is not intended to replace our financial statements and the accompanying notes.

We have derived the selected statement of operations data for the years ended December 31, 2009, 2010 and 2011 and the selected balance sheet data as of December 31, 2010 and 2011 from our audited financial statements that are included in this prospectus. We have derived the statement of operations data for the years ended December 31, 2007 and 2008 and the selected balance sheet data as of December 31, 2007, 2008 and 2009 from our audited financial statements that are not included in this prospectus. We have derived the selected statement of operations data for the nine months ended September 30, 2011 and 2012 and the selected balance sheet data as of September 30, 2012 from our unaudited financial statements that are included in this prospectus.

Pro forma basic and diluted net (loss) income per common share have been calculated assuming the conversion of all outstanding shares of convertible preferred stock into shares of common stock. See Note 1 to our financial statements for an explanation of the method used to determine the number of shares used in computing historical and pro forma basic and diluted net (loss) income per common share.

The unaudited financial data include, in the opinion of our management, all adjustments, consisting only of normal recurring adjustments, that are necessary for a fair presentation of our financial position and results of operations for these periods. Our historical results are not necessarily indicative of the results to be expected in any future period and our results for any interim period are not necessarily indicative of the results that may be expected for a full fiscal year.

	Year Ended December 31,					Nine Months Ended September 30,	
	2007	2008	2009	2010	2011	2011	2012
	(In thousands, except share and per share data)						
Statement of Operations Data:							
Revenues	$24,758	$28,954	$34,713	$39,368	$45,807	$33,328	$41,241
Cost of revenues	6,720	7,354	7,792	8,139	8,529	6,367	7,622
Gross profit	18,038	21,600	26,921	31,229	37,278	26,961	33,619
Operating expenses:							
Research and development	9,293	7,245	6,156	7,276	7,808	5,698	7,418
Sales and marketing	10,010	12,137	12,990	15,246	21,305	15,453	16,746
General and administrative	5,593	5,964	7,020	7,331	8,550	6,248	7,764
Gain on extinguishment of other long-term liabilities	–	–	–	(2,700)	–	–	–
Total operating expenses	24,896	25,346	26,166	27,153	37,663	27,399	31,928
(Loss) income from operations	(6,858)	(3,746)	755	4,076	(385)	(438)	1,691
Total other income (expense)	1,366	112	(495)	220	(163)	(130)	(634)
(Loss) income before taxes	(5,492)	(3,634)	260	4,296	(548)	(568)	1,057
Income tax expense (benefit)	–	–	2	(16)	–	–	–
Net (loss) income	(5,492)	(3,634)	258	4,312	(548)	(568)	1,057
Accrual of dividends on redeemable convertible preferred stock	(1,040)	(1,040)	(1,040)	(1,040)	(613)	(612)	–
Undistributed earnings allocated to preferred stockholders	–	–	–	(2,655)	–	–	(850)
Net (loss) income attributable to common stockholders - basic	(6,532)	(4,674)	(782)	617	(1,161)	(1,180)	207
Undistributed earnings re-allocated to common stockholders	–	–	–	303	–	–	109
Net (loss) income attributable to common stockholders - diluted	$(6,532)	$(4,674)	$(782)	$920	$(1,161)	$(1,180)	$316
Net (loss) income attributable to common stockholders per share - basic	$(4.10)	$(2.93)	$(0.49)	$0.38	$(0.69)	$(0.71)	$0.12
Net (loss) income attributable to common stockholders per share - diluted	$(4.10)	$(2.93)	$(0.49)	$0.34	$(0.69)	$(0.71)	$0.11
Weighted average shares of common stock outstanding used in computing net (loss) income per share - basic	1,594,640	1,594,048	1,596,920	1,611,843	1,674,018	1,666,820	1,704,736
Weighted average shares of common stock outstanding used in computing net (loss) income per share - diluted	1,594,640	1,594,048	1,596,920	2,713,770	1,674,018	1,666,820	2,984,817
Pro forma net (loss) income per share of common stock - basic					$(0.09)		$0.07
Pro forma net (loss) income per share of common stock - diluted					$(0.09)		$0.06

Weighted average shares of common stock outstanding used in computing pro forma net (loss) income per share – basic	8,659,971	8,690,689
Weighted average shares of common stock outstanding used in computing pro forma net (loss) income per share – diluted	8,659,971	9,970,770

	As of December 31,					As of September 30,
	2007	2008	2009	2010	2011	2012
	(in thousands)					
Balance Sheet Data:						
Cash and cash equivalents	$7,770	$9,889	$12,045	$11,058	$12,483	$ 10,279
Short-term investments	2,409	–	–	–	–	–
Accounts receivable, net	3,009	3,076	3,363	4,194	5,626	8,057
Total assets	18,037	17,348	19,509	20,141	28,117	33,549
Revolving line of credit	–	–	–	–	–	3,500
Long-term debt, including current portion	187	2,000	3,000	1,200	6,000	4,200
Preferred stock warrant liability	785	901	1,104	597	229	462
Total liabilities	6,457	8,978	10,296	4,929	12,025	15,480
Redeemable convertible preferred stock and convertible preferred stock	51,125	52,362	53,599	55,845	57,165	57,165
Accumulated deficit	(49,629)	(53,265)	(53,007)	(48,695)	(49,243)	(48,186)
Total stockholders' deficit	(39,542)	(43,990)	(44,385)	(40,632)	(41,071)	(39,094)

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

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the financial statements and the related notes to those statements included later in this prospectus. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, beliefs and expectations that involve risks and uncertainties. Our actual results and the timing of events could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this prospectus, particularly in "Risk Factors."

Overview

We are an *in vitro* diagnostic company pioneering a new field of personalized diagnostics based on nuclear magnetic resonance, or NMR, technology. Our first diagnostic test, the *NMR LipoProfile* test, directly measures the number of low density lipoprotein, or LDL, particles in a blood sample and provides physicians and their patients with actionable information to personalize management of risk for heart disease. Our automated clinical analyzer, the *Vantera* system, has recently been cleared by the FDA. The *Vantera* system requires no previous knowledge of NMR technology to operate and has been designed to significantly simplify complex technology through ease of use and walk-away automation. We plan to selectively place the *Vantera* system on-site with national and regional clinical laboratories as well as leading medical centers and hospital outreach laboratories. We are driving toward becoming a clinical standard of care by decentralizing our technology and expanding our menu of personalized diagnostic tests to address a broad range of cardiovascular, metabolic and other diseases.

To date, the *NMR LipoProfile* test has been ordered over 8 million times, and the number of tests ordered has grown at a compound annual growth rate of approximately 30% from 2006 to 2011. The *NMR LipoProfile* test is reimbursed by a number of governmental and private payors, which we believe collectively represent approximately 150 million covered lives.

We currently perform all *NMR LipoProfile* testing at our certified and accredited laboratory facilities in Raleigh, North Carolina. To accelerate clinician and clinical diagnostic laboratory adoption of the *NMR LipoProfile* test and future personalized diagnostic tests, we plan to decentralize access to our technology platform through direct placement of our new *Vantera* system, an automated version of our NMR clinical analyzer, on site at clinical diagnostic laboratories and hospital outreach laboratories. In August 2012, we received FDA clearance to market our *Vantera* system commercially to third-party laboratories, which we believe will facilitate their ability to offer our *NMR LipoProfile* test and any other diagnostic tests that we may develop.

We have entered into agreements with some of our current clinical diagnostic laboratory customers to place the *Vantera* system in their laboratories. We are also in discussions with additional laboratory customers who have indicated a similar interest in the placement of the *Vantera* system. We currently expect these placements to begin in the first quarter of 2013. We will retain full ownership of any *Vantera* analyzers placed in third-party laboratories and will be responsible for support and maintenance obligations. In general, we expect that the number of *Vantera* analyzers that will be placed in our clinical diagnostic laboratory customers' facilities will depend on their demonstrated annual production volume for the *NMR LipoProfile* test and their ability to increase demand for our tests.

We believe that the inherent analytical advantages of NMR technology will also allow us to expand our diagnostic test menu. We are currently developing NMR-based diagnostic test for use in the prediction of diabetes, including the assessment of insulin resistance, and we are investigating opportunities to develop new diagnostic tests for other diseases.

We have incurred significant losses since our inception. As of September 30, 2012, our accumulated deficit was $48.2 million. We expect to incur significant operating losses for the next several years as we seek to establish the *NMR LipoProfile* test as a clinical standard of care for managing a patient' s risk of cardiovascular disease.

Financial Operations Overview

Revenues

Substantially all of our revenues are currently derived from sales of our *NMR LipoProfile* test to clinical diagnostic laboratories, physicians and other healthcare professionals for use in patient care. For the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012, sales of the *NMR LipoProfile* test represented approximately 85%, 87%, 93% and 94%, respectively, of our total revenues. The remainder of our revenues is derived from sales of standard analytical chemistry tests, which we refer to as ancillary tests, requested by clinicians in conjunction with our *NMR LipoProfile* test, as well as revenue from research contracts. Ancillary tests are FDA-approved blood tests that any clinical laboratory can process but that may be ordered from us at the same time as the *NMR LipoProfile* test for convenience. These tests are not run on our NMR technology platform, but instead are run on a traditional chemistry analyzer. We anticipate that the proportion of our revenues represented by sales of the *NMR LipoProfile* test will continue to increase as we increase the number of these tests performed for our customers.

The following table presents our revenues by service offering and source:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
	(in thousands)				
Revenues:					
NMR LipoProfile tests	$29,424	$34,394	$42,392	$30,662	$38,938
Ancillary tests	4,182	3,425	2,178	1,691	1,367
Research contracts	1,107	1,549	1,237	975	936
Total revenues	$34,713	39,368	$45,807	$33,328	$41,241

Our revenues are driven by both test volume and the average selling price of our *NMR LipoProfile* test. We expect to increase the proportion of our business conducted on a wholesale basis through clinical diagnostic laboratories as compared to our direct distribution channel in which clinicians order the test directly from us. We expect this trend to continue as we decentralize access to our *NMR LipoProfile* test by placing the *Vantera* system directly in third-party laboratories. For direct sales, the price we ultimately receive depends upon the level of reimbursement from Medicare or commercial insurance carriers. Clinical diagnostic laboratories purchase our test at prices that we negotiate with them, which will continue to be the case for *NMR LipoProfile* tests performed using the *Vantera* system, whether the analyzer is located on-site at the customer' s laboratory or at our own facility. These clinical diagnostic laboratories are responsible for obtaining reimbursement from third-party payors or directly from patients. The average selling price of our tests sold to these laboratories is less than that for tests we sell directly to clinicians. We expect that our overall average selling price will continue to decline in the near future, as we increase the proportion of our business conducted on a wholesale basis through clinical diagnostic laboratories. We expect this trend to continue as we place the *Vantera* system in third-party laboratories, as the price we receive for a test performed on-site at third-party laboratories using the *Vantera* system will generally be less than the price for the same test performed at our own facility. However, we do not expect that our revenues, income from operations or liquidity will be materially affected by an erosion of average selling price due to changes in the channel mix, as we believe that the increase in test volumes through these laboratories and the number of laboratory customers offering our *NMR LipoProfile* tests will outweigh the impact of decreases in average selling price, especially if demand increases for *Vantera* placements.

During the initial rollout period for the *Vantera* system, we expect that most *Vantera* placements will be with our existing clinical diagnostic laboratory customers. As a result, we anticipate a gradual shift in the *NMR LipoProfile* tests performed from our existing laboratory facility to our customers' facilities. We expect that the reduced volume in the number of tests performed at our facility will be partially offset by growth in *NMR LipoProfile* test orders from new clinical diagnostic laboratory customers who may not initially meet our test volume criteria for a *Vantera* system placement.

Our revenues from ancillary tests, while a diminishing portion of our business, are similarly dependent upon our rates of reimbursement from various payor sources. For example, Medicare reimbursement rates are established by the Centers for Medicare and Medicaid Services each year. Changes in Medicare reimbursement rates are dependent on a number of factors that we cannot predict. Reductions in reimbursement rates for these ancillary tests would reduce our overall revenues from these tests.

Cost of Revenues and Operating Expenses

We allocate certain overhead expenses, such as rent, utilities, and depreciation of general office assets to cost of revenues and operating expense categories based on headcount and facility usage. As a result, an overhead expense allocation is reflected in cost of revenues and each operating expense category.

Cost of Revenues and Gross Margin

Cost of revenues consists of direct labor expenses, including employee benefits and stock-based compensation expenses, cost of laboratory supplies, freight costs, royalties paid under license agreements, depreciation of laboratory equipment, leasehold improvements and certain allocated overhead expenses. Once we launch the *Vantera* system and place the system on-site with third parties, the additional service and maintenance costs for these analyzers will also be included in cost of revenues. We expect these expenses to increase in absolute dollars as we support our customers' use of the *Vantera* system, although we expect these increased expenses to be offset by increased revenues from additional test volume. During the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012, our cost of revenues represented approximately 22%, 21%, 19% and 18%, respectively, of our total revenues.

Our gross profit represents total revenues less the cost of revenues, and gross margin is gross profit expressed as a percentage of total revenues. Our gross margins were approximately 78%, 79%, 81% and 82%, respectively, for the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012. We expect our overall cost of revenues to increase in absolute dollars as we continue to increase our volume of tests performed. However, we also believe that we can achieve certain efficiencies in our laboratory operations through these increased test volumes that can help maintain our overall margins.

Research and Development Expenses

Our research and development expenses include those costs associated with performing research and development activities, such as personnel-related expenses, including stock-based compensation, fees for contractual and consulting services, travel costs, laboratory supplies and allocated overhead expenses. We expense all research and development costs as incurred.

During the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012, our research and development expenses represented approximately 18%, 18%, 17% and 18%, respectively, of our total revenues. We expect that our overall research and development expenses will continue to increase in absolute dollars as we develop additional *in vitro* diagnostic assay candidates that can be performed using the *Vantera* system.

Sales and Marketing Expenses

Our sales and marketing expenses include costs associated with our sales organization, including our direct sales force and sales management, and our marketing, managed care and business development personnel. These expenses consist principally of salaries, commissions, bonuses and employee benefits for these personnel, including stock-based compensation, as well as travel costs related to sales and marketing activities, marketing and medical education activities and allocated overhead expenses. We expense all sales and marketing costs as incurred.

During the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012, our sales and marketing expenses represented approximately 37%, 39%, 47% and 41%, respectively, of our total revenues. We expect our sales and marketing costs to increase, both in absolute dollars as well as a percentage of our total revenues, as we expand our sales force, increase our geographic presence, and increase marketing and medical education to drive awareness and adoption of the *NMR LipoProfile* test.

General and Administrative Expenses

Our general and administrative expenses include costs for our executive, accounting and finance, legal, and human resources functions. These expenses consist principally of salaries, bonuses and employee benefits for the personnel included in these functions, including stock-based compensation and professional services fees, such as consulting, audit, tax and legal fees, general corporate costs and allocated overhead expenses, and bad debt expense. We expense all general and administrative expenses as incurred.

During the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012, our general and administrative expenses represented approximately 20%, 19%, 19% and 19%, respectively, of our total revenues. We expect that our general and administrative expenses will increase after this offering, primarily due to the costs of operating as a public company, such as additional legal, accounting and corporate governance expenses, including expenses related to compliance with the Sarbanes-Oxley Act of 2002, directors' and officers' insurance premiums and investor relations expenses.

Medical Device Tax

The PPACA includes provisions that, among other things, require the medical device industry to subsidize healthcare reform in the form of a 2.3% excise tax on U.S. sales of most medical devices beginning in 2013. Regulations implementing the tax were finalized in December 2012, but the long-term impact to our company remains uncertain as some members of Congress are working to delay enactment of the tax. While we continue to evaluate the impact of this tax on our overall business, this tax is applicable to the sales of our *NMR LipoProfile* tests and could adversely affect our results of operations, cash flows and financial condition.

Other Income (Expense)

Interest income consists of interest earned on our cash and cash equivalents. During the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012, this income has not been material, although we expect our interest income to increase following this offering as we invest the net proceeds from the offering.

Interest expense consists primarily of interest expense on our loan balances and the amortization of debt discounts and debt issuance costs. We amortize debt issuance costs over the life of the loan and report them as interest expense in our statements of operations.

We had a term loan from Square 1 with an outstanding balance of $4.2 million as of September 30, 2012. This loan carried a variable annual interest rate equal to the greater of 7.25% or the prime rate plus 3.75%. We also had a revolving line of credit from Square 1 with an outstanding balance of $3.5 million as of September 30, 2012. Borrowings under this line of credit carried a variable annual interest rate equal to the greater of 6.25% or the prime rate plus 3.0%. In December 2012, we refinanced our indebtedness and paid off the foregoing loans. As part of the refinancing, we now have term loans from Oxford Finance with an outstanding balance of $10.0 million as of December 31, 2012 and a term loan from Square 1 with an outstanding balance of $6.0 million as of December 31, 2012, as well as a new revolving line of credit with Square 1 with a maximum borrowing capacity of $6.0 million and an outstanding balance of $5.0 million as of December 31, 2012. Under the new credit facility, the term loans carry a fixed interest rate of 9.5%, while advances under the line of credit will continue to carry a variable interest rate equal to the greater of 6.25% or Square 1' s prime rate plus 3.0%.

Other income and expense primarily consists of costs incurred as a result of changes in the fair value of our preferred stock warrant liability and gains and losses on sale or disposal of assets. The fair value of preferred stock warrants is re-measured each reporting period and changes in fair value are recognized in other income (expense). Upon completion of this offering, the preferred stock warrants will automatically convert into warrants to purchase common stock and no further changes in fair value will be recognized in other income (expense).

Results of Operations

Comparison of Nine Months Ended September 30, 2011 and 2012

The following table sets forth, for the periods indicated, the amounts of certain components of our statements of operations and the percentage of total revenues represented by these items, showing period-to-period changes.

	Nine months ended September 30,				Period-to-period change	
	2011	% of Revenues	2012	% of Revenues	Amount	Percentage
	(in thousands, except for percentages)					
Revenues	$33,328	100.0 %	$41,241	100.0 %	$ 7,913	23.7 %
Cost of revenues	6,367	19.1	7,622	18.5	1,255	19.7
Gross profit	26,961	80.9	33,619	81.5	6,658	24.7
Operating expenses:						
Research and development	5,698	17.1	7,418	18.0	1,720	30.2
Sales and marketing	15,453	46.4	16,746	40.6	1,293	8.4
General and administrative	6,248	18.7	7,764	18.8	1,516	24.3
Total operating expenses	27,399	82.2	31,928	77.4	4,529	16.5
Loss (income) from operations	(438)	(1.3)	1,691	4.1	2,129	*
Total other expense	(130)	(0.4)	(634)	(1.5)	(504)	*
Loss (income) before taxes	(568)	(1.7)	1,057	2.6	1,625	*
Income tax expense (benefit)	–	–	–	–	–	–
Net income (loss)	$(568)	(1.7)%	$1,057	2.6 %	$ 1,625	*

* *Percentage not meaningful*

Revenues

Total revenues increased by 23.7% to $41.2 million for the nine months ended September 30, 2012 from $33.3 million for the nine months ended September 30, 2011. Revenues from sales of our *NMR LipoProfile* test increased to $38.9 million for the nine months ended September 30, 2012 from $30.7 million for the nine months ended September 30, 2011, resulting from growth in the number of *NMR LipoProfile* tests sold, particularly to our clinical diagnostic laboratory customers. This growth reflected the impact of an increase in the number of our sales representatives and greater geographic coverage of our sales force, as well as increased market acceptance of our test.

The overall number of *NMR LipoProfile* tests increased by 34.8% to approximately 1,459,000 tests for the nine months ended September 30, 2012 from approximately 1,082,000 tests for the nine months ended September 30, 2011. The overall average selling price of *NMR LipoProfile* tests decreased 7.0%, to $26.69 for the nine months ended September 30, 2012 from $28.34 for the nine months ended September 30, 2011. This decrease in average selling price was primarily the result of a continuing shift in channel mix toward clinical laboratory customers. The percentage of our total *NMR LipoProfile* tests sold through direct distribution channels decreased from 8% for the nine months ended September 30, 2011 to 5% for the nine months ended September 30, 2012. This continued shift reflects our current strategy of accelerating the adoption of our *NMR LipoProfile* test through clinical diagnostic laboratories, which we expect to result in fewer tests ordered through direct channels and an overall decrease in average selling price.

Revenues from sales of ancillary tests decreased from $1.7 million for the nine months ended September 30, 2011 to $1.4 million for the nine months ended September 30, 2012. The decrease in revenues from these ancillary tests was primarily driven by the shift in testing mix and an overall reduction of reimbursement rates from Medicare. Revenues from our clinical research clients were approximately $1.0 million and $0.9 million for the nine-month periods ended September 30, 2011 and 2012, respectively.

Cost of Revenues and Gross Margin

Cost of revenues increased by 19.7%, to $7.6 million for the nine months ended September 30, 2012 from $6.4 million for the nine months ended September 30, 2011. This increase resulted primarily from the increase in the number of *NMR LipoProfile* tests sold to patient care clients during the nine months ended September 30, 2012. This additional testing volume resulted in increased freight costs and required additional personnel, which increased our compensation, benefit and allocated costs. These increases were partially offset by lower material costs due to fewer ancillary tests being performed and lower royalty expenses due to the expiration of the NCSU license. Gross profit as a percentage of total revenues, or gross margin, increased to 81.5% for the nine months ended September 30, 2012 from 80.9% for the nine months ended September 30, 2011. The improvement we experienced in gross margin resulted primarily from increased sales volume coupled with operating efficiencies in our clinical laboratory.

Research and Development Expenses

Research and development expenses increased by 30.2% to $7.4 million for the nine months ended September 30, 2012 from $5.7 million for the nine months ended September 30, 2011. This increase was primarily the result of $0.9 million in higher salaries and benefits, including stock-based compensation expense, $0.3 million in higher travel related expenses, from increased headcount within our research and development function, and $0.4 million in higher depreciation expense associated with immaterial correction of an error relating to prior period during the nine months ended September 30, 2012. The total number of our research and development employees increased to 47 at September 30, 2012 from 37 at September 30, 2011. As a percentage of total revenues, research and development expenses increased to 18.0% for the nine months ended September 30, 2012, as compared to 17.1% for the nine months ended September 30, 2011.

Sales and Marketing Expenses

Sales and marketing expenses increased by 8.4%, to $16.7 million for the nine months ended September 30, 2012 from $15.5 million for the nine months ended September 30, 2011. This increase reflected an increase of $1.0 million in compensation and benefits costs and travel and entertainment-related expenses as a result of the growth and expansion of our sales organization. The total number of our sales and marketing employees increased to 73 at September 30, 2012 from 70 at September 30, 2011. In addition, we experienced $0.3 million in higher allocated expenses due to increases in information technology and facility costs. While sales and marketing expenses increased in absolute dollar amounts, they decreased as a percentage of total revenues from 46.4% for the nine months ended September 30, 2011 to 40.6% for the nine months ended September 30, 2012.

General and Administrative Expenses

General and administrative expenses increased by 24.3%, to $7.8 million for the nine months ended September 30, 2012 from $6.2 million for the nine months ended September 30, 2011. This increase was primarily the result of $1.0 million in higher salaries and benefits, including stock-based compensation expense, from increased headcount within our general and administrative function, and $0.6 million in higher professional fees, from additional legal fees associated with the OIG gift card matter and the DOJ investigation and additional expenses associated with expanded compliance efforts. We incurred $0.4 million in legal and accounting expenses in the 2012 period in connection with the OIG gift card matter. The total number of our general and

administrative employees increased to 34 at September 30, 2012 from 27 at September 30, 2011. In addition, we experienced $0.3 million in higher allocated expenses due to increases in information technology and facility costs. This increase was partially offset by a $0.3 million reduction in bad debt expense.

Our bad debt expense was $0.8 million for the nine months ended September 30, 2012 and $1.1 million for the nine months ended September 30, 2011. As a percentage of total revenues, bad debt expense decreased to 1.8% for the nine months ended September 30, 2012 from 3.2% for the nine months ended September 30, 2011. The decrease in bad debt expense, both in absolute dollars and as a percentage of total revenues, resulted primarily from the shift of our customer base towards clinical diagnostic laboratories, from which we typically experience improved collection rates.

As a percentage of total revenues general and administrative expenses increased to 18.8% for the nine months ended September 30, 2012, compared to 18.7% for the nine months ended September 30, 2011.

Other Income (Expense)

Other expense increased to $0.6 million for the nine months ended September 30, 2012 from an expense of $0.1 million for the nine months ended September 30, 2011. The increase was primarily attributable to a $0.1 million increase in interest expense compared to the prior year period, due to higher average principal amounts outstanding on our indebtedness during the later period. We also experienced a $0.4 million increase in other expense as a result of changes in the fair value of our preferred stock warrant liability between the periods. In addition, we incurred a $59,000 loss on the extinguishment of debt recognized during the first quarter of 2011 as a result of refinancing our credit facility with Square 1.

Comparison of Years Ended December 31, 2010 and 2011

The following table sets forth, for the periods indicated, the amounts of certain components of our statements of operations and the percentage of total revenues represented by these items, showing period-to-period changes.

	Year ended December 31,				Period-to-Period Change	
	2010	% of Revenues	2011	% of Revenues	Amount	Percentage
	(in thousands, except for percentages)					
Revenues	$39,368	100.0 %	$45,807	100.0 %	$6,439	16.4 %
Cost of revenues	8,139	20.7	8,529	18.6	390	4.8
Gross profit	31,229	79.3	37,278	81.4	6,049	19.4
Operating expenses:						
Research and development	7,276	18.5	7,808	17.0	532	7.3
Sales and marketing	15,246	38.7	21,305	46.5	6,059	39.7
General and administrative	7,331	18.6	8,550	18.7	1,219	16.6
Gain on extinguishment of other long-term Liabilities	(2,700)	(6.9)	–	–	2,700	*
Total operating expenses	27,153	69.0	37,663	82.2	10,510	38.7
Income (loss) from operations	4,076	10.4	(385)	(0.8)	(4,461)	*
Total other income (expense)	220	0.6	(163)	(0.4)	(383)	*
Income (loss) before taxes	4,296	10.9	(548)	(1.2)	(4,844)	*
Income tax (benefit) expense	(16)	(0.0)	–	–	16	*
Net income (loss)	$4,312	11.0 %	$(548)	(1.2)%	$(4,860)	*

* *Percentage not meaningful*

Revenues

Total revenues increased by 16.4%, to $45.8 million for the year ended December 31, 2011 from $39.4 million for the year ended December 31, 2010. Revenues from sales of our *NMR LipoProfile* test increased to $42.4 million for the year ended December 31, 2011 from $34.4 million for the year ended December 31, 2010, resulting from growth in the number of *NMR LipoProfile* tests sold, particularly to our clinical diagnostic laboratory customers. This growth reflected the impact of an increase in the number of our sales representatives and greater geographic coverage of our sales force, and volume growth attributable to recently acquired clinical diagnostic laboratory customers such as Health Diagnostic Laboratory, Inc., as well as increased market acceptance of our test.

The overall number of *NMR LipoProfile* tests increased by 38.9% to approximately 1,508,000 tests for the year ended December 31, 2011 from approximately 1,086,000 tests for the year ended December 31, 2010. The overall average selling price of *NMR LipoProfile* tests decreased 11.3%, to $28.10 for the year ended December 31, 2011 from $31.67 for the year ended December 31, 2010. This decrease in average selling price was primarily the result of a continuing shift in channel mix toward clinical laboratory customers. The percentage of total *NMR LipoProfile* tests sold through our direct distribution channel decreased from 16% for the year ended December 31, 2010 to 8% for the year ended December 31, 2011. This decrease reflected our strategy of accelerating the adoption of our *NMR LipoProfile* test through clinical diagnostic laboratories.

Revenues from sales of ancillary tests decreased from $3.4 million for the year ended December 31, 2010 to $2.2 million for the year ended December 31, 2011. The decrease in revenues from ancillary tests was primarily driven by the shift in testing mix and an overall reduction of reimbursement rates from Medicare. Revenues from our clinical research clients were $1.5 million and $1.2 million for the years ended December 31, 2010 and 2011, respectively.

Cost of Revenues and Gross Margin

Cost of revenues increased by 4.8%, to $8.5 million for the year ended December 31, 2011 from $8.1 million for the year ended December 31, 2010. This increase resulted primarily from the increase in the number of *NMR LipoProfile* tests sold to patient care clients during the year ended December 31, 2011. This additional testing volume resulted in increased freight and material costs and repair and maintenance costs. We also experienced higher overhead costs due to increases in information technology and facility costs. Gross margin increased to 81.4% for the year ended December 31, 2011 from 79.3% for the year ended December 31, 2010. The improvement in gross margin resulted primarily from increased sales volume coupled with operating efficiencies in our clinical laboratory.

Research and Development Expenses

Research and development expenses increased by 7.3%, to $7.8 million for the year ended December 31, 2011 from $7.3 million for the year ended December 31, 2010. This increase was primarily the result of $1.5 million in higher salaries and benefits, including stock-based compensation expense, as well as associated operational costs from increased headcount within our research and development function. The total number of our research and development employees increased to 42 at December 31, 2011 from 32 at December 31, 2010. This increase was partially offset by $1.0 million in lower spending associated with contract services due to lower utilization of external consultants in the development of our *Vantera* system. As a percentage of total revenues, research and development expenses decreased to 17.0% for the year ended December 31, 2011, as compared to 18.5% for the year ended December 31, 2010.

Sales and Marketing Expenses

Sales and marketing expenses increased by 39.7%, to $21.3 million for the year ended December 31, 2011 from $15.2 million for the year ended December 31, 2010. This increase reflected $3.3 million in higher

compensation and benefits costs as a result of the growth and expansion of our sales organization and $0.7 million in additional spending associated with travel and entertainment-related expenses, $1.9 million in higher marketing expenses associated with our market awareness efforts and medical education and $0.1 million in higher allocated expenses due to increases in information technology and facility costs. The total number of our sales and marketing employees increased to 70 at December 31, 2011 from 61 at December 31, 2010. As a percentage of total revenues, sales and marketing expenses increased to 46.5% for the year ended December 31, 2011 from 38.7% for the year ended December 31, 2010. The increased sales and marketing expenses as a percentage of total revenues resulted primarily from the expansion of our sales force as we increased our geographic presence.

General and Administrative Expenses

General and administrative expenses increased by 16.6%, to $8.6 million for the year ended December 31, 2011 from $7.3 million for the year ended December 31, 2010. This increase was attributable to a $0.9 million increase in legal and accounting expenses incurred in connection with this offering that were not capitalized as deferred offering costs, as well as additional contracted labor costs within our finance department. We also experienced $0.6 million in higher compensation and benefits costs due mainly to higher bonus expense, as we met the overall 2011 corporate financial targets on which bonuses were based. In addition, we experienced $0.1 million in higher allocated expenses due to increases in information technology and facility costs. These increases were partially offset by $0.4 million in lower bad debt expense. As a percentage of total revenues, general and administrative expenses increased to 18.7% for the year ended December 31, 2011 from 18.6% for the year ended December 31, 2010.

Our bad debt expense was $1.4 million for the year ended December 31, 2011 and $1.7 million for the year ended December 31, 2010. As a percentage of total revenues, bad debt expense decreased to 3.0% for the year ended December 31, 2011 from 4.4% for the year ended December 31, 2010. The decrease in bad debt expense as a percentage of total revenues resulted primarily from the shift of our customer base towards clinical diagnostic laboratories, from which we typically experience improved collection rates.

Other Income (Expense)

Other income (expense) changed by $0.4 million, to an expense of $0.2 million for the year ended December 31, 2011 from income of $0.2 million for the year ended December 31, 2010. The change was primarily attributable to a $0.1 million decrease in other income as a result of changes in the fair value of our preferred stock warrant liability between the periods. We also experienced a $0.2 million increase in interest expense compared to the prior year period, due to higher principal amounts outstanding on our indebtedness during the respective periods and a $0.1 million loss for extinguishment of debt during the first quarter of 2011 that we recognized as a result of refinancing our credit facility with Square 1.

Comparison of Years Ended December 31, 2009 and 2010

The following table sets forth, for the periods indicated, the amounts of certain components of our statements of operations and the percentage of total revenues represented by these items, showing period-to-period changes.

	Year Ended December 31,				Period-to-Period Change	
	2009	% of Revenues	2010	% of Revenues	Amount	Percentage
	(in thousands, except for percentages)					
Revenues	$34,713	100.0 %	$39,368	100.0 %	$4,655	13.4 %
Cost of revenues	7,792	22.4	8,139	20.7	347	4.5
Gross profit	26,921	77.6	31,229	79.3	4,308	16.0
Operating expenses:						
Research and development	6,156	17.7	7,276	18.5	1,120	18.2
Sales and marketing	12,990	37.4	15,246	38.7	2,256	17.4
General and administrative	7,020	20.2	7,331	18.6	311	4.4
Gain on extinguishment of other long-term liabilities	–	–	(2,700)	(6.9)	(2,700)	*
Total operating expenses	26,166	75.4	27,153	69.0	987	3.8
Income from operations	755	2.2	4,076	10.4	3,321	439.9
Total other income (expense)	(495)	(1.4)	220	0.6	715	*
Income before taxes	260	0.7	4,296	10.9	4,036	1,552.3
Income tax expense (benefit)	2	0.0	(16)	(0.0)	(18)	*
Net income	$258	0.7 %	$4,312	11.0 %	$4,054	1,571.3

* *Percentage not meaningful*

Revenues

Total revenues increased by 13.4%, to $39.4 million for the year ended December 31, 2010 from $34.7 million for the year ended December 31, 2009. Revenues from sales of our *NMR LipoProfile* test increased to $34.4 million for the year ended December 31, 2010 from $29.4 million for the year ended December 31, 2009, resulting from growth in the number of *NMR LipoProfile* tests sold, particularly to our clinical diagnostic laboratory customers. This growth reflected the impact of an increase in the number of our sales representatives and greater geographic coverage of our sales force, as well as increased acceptance of our test.

The overall number of *NMR LipoProfile* tests increased by 23.2% to approximately 1,086,000 tests for the year ended December 31, 2010 from approximately 882,000 tests for the year ended December 31, 2009. The overall average selling price of *NMR LipoProfile* tests decreased 5.1%, to $31.67 for the year ended December 31, 2010 from $33.37 for the year ended December 31, 2009. This decrease in average selling price was primarily the result of a continuing shift in channel mix toward clinical laboratory customers. The percentage of total *NMR LipoProfile* tests sold through our direct distribution channel decreased from 19% for the year ended December 31, 2009 to 16% for the year ended December 31, 2010.

Revenues from sales of ancillary tests decreased from $4.2 million for the year ended December 31, 2009 to $3.4 million for the year ended December 31, 2010. The decrease in revenues from these ancillary tests was primarily driven by the shift in our channel mix.

Revenues from our clinical research clients increased from $1.1 million for the year ended December 31, 2009 to $1.5 million for the year ended December 31, 2010.

Cost of Revenues and Gross Margin

Cost of revenues increased by 4.5%, to $8.1 million for the year ended December 31, 2010 from $7.8 million for the year ended December 31, 2009. This increase resulted primarily from the increase in the number of *NMR LipoProfile* tests sold to patient care and research clients during the year ended December 31, 2010. This additional testing volume resulted in increased freight and material costs and required additional personnel, which increased our compensation and benefits costs. Gross margin increased to 79.3% for the year ended December 31, 2010 from 77.6% from the year ended December 31, 2009. The improvement experienced in gross margin resulted primarily from increased sales volume coupled with operating efficiencies and an increase in our production capacity utilization.

Research and Development Expenses

Research and development expenses increased by 18.2%, to $7.3 million for the year ended December 31, 2010 from $6.2 million for the year ended December 31, 2009. This increase resulted primarily from $0.9 million of higher compensation and benefits costs, including relocation and recruiting fees, due to increased headcount within our research and development department. The total number of our research and development employees increased to 32 at December 31, 2010 from 28 at December 31, 2009. We also incurred $0.2 million in additional costs associated with contract services for the continued development of our *Vantera* system. As a percentage of total revenues, research and development expenses increased to 18.5% for the year ended December 31, 2010 from 17.7% for the year ended December 31, 2009.

Sales and Marketing Expenses

Sales and marketing expenses increased by 17.4%, to $15.2 million for the year ended December 31, 2010 from $13.0 million for the year ended December 31, 2009. This increase reflected an increase of $1.3 million in compensation and benefits costs and an increase of $1.0 million in travel and entertainment-related expenses as a result of the growth and expansion of our sales organization, as well as higher marketing expenses associated with market awareness and medical education. The total number of our sales and marketing employees increased to 61 at December 31, 2010 from 44 at December 31, 2009. We also incurred additional costs associated with contract services for increased marketing and market research efforts as we refined our overall product offering message and marketing program effectiveness. As a percentage of total revenues, sales and marketing expenses increased to 38.7% for the year ended December 31, 2010 from 37.4% for the year ended December 31, 2009.

General and Administrative Expenses

General and administrative expenses increased by 4.4%, to $7.3 million for the year ended December 31, 2010 from $7.0 million for the year ended December 31, 2009. This increase was primarily due to an increase in compensation and benefits costs, including stock-based compensation, attributable to general and administrative personnel. As a percentage of total revenues, general and administrative expenses decreased to 18.6% for the year ended December 31, 2010 from 20.2% for the year ended December 31, 2009.

Bad debt expense remained constant at $1.8 million for each of the years ended December 31, 2010 and 2009. As a percentage of total revenues, bad debt expense decreased to 4.4% for the year ended December 31, 2010 from 5.2% for the year ended December 31, 2009. The decrease in bad debt expense as a percentage of total revenues resulted from improved collection trends due to process improvement programs within our billing department, coupled with the shift in our customer base towards clinical diagnostic laboratories.

Gain on Extinguishment of Other Long-Term Liabilities

In September 2010, we were released from a $2.7 million payment obligation to a third-party contractor for prior research and development services. We recorded the release of this liability as a gain on extinguishment of other long-term liabilities within the operating expenses section of our statement of operations for the year ended December 31, 2010.

Other Income (Expense)

Other income (expense) changed by $0.7 million, to income of $0.2 million for the year ended December 31, 2010 from expense of $0.5 million for the year ended December 31, 2009. The improvement was primarily attributable to a $0.6 million increase in other income as a result of changes in the fair value of our preferred stock warrant liability between the periods. We also experienced a $0.1 million decrease in interest expense due to lower principal amounts outstanding on our indebtedness.

Liquidity and Capital Resources

Sources of Liquidity

To date, we have funded our operations principally through private placements of our capital stock, bank borrowings and, during 2009, 2010 and 2011, cash flows from operations. We have raised approximately $58.7 million from the sale of common stock and convertible preferred stock to third parties. The last of these equity financing transactions occurred in 2006.

In February 2008, we entered into a credit facility with Square 1 that provided for a term loan of $4.5 million and a revolving line of credit of up to $3.0 million. We have entered into a series of amendments to this credit facility with Square 1 to, among other things, increase the term loan to $6.0 million and the revolving line of credit capacity to $4.0 million. Interest on the term loan accrued at a variable annual rate equal to the greater of 7.25%, or the prime rate plus 3.75%. Interest on amounts borrowed under the line of credit accrued at a variable annual rate equal to the greater of 6.25%, or prime rate plus 3.00%. We were required only to make interest payments on the term loan through December 31, 2011. Repayment of principal amounts due under the term loan commenced in January 2012 and were scheduled to continue in 30 monthly installments through June 2014. As of September 30, 2012, we owed $4.2 million under the term loan, and $3.5 million under the revolving line of credit, which was scheduled to mature in May 2013.

In December 2012, we entered into a new credit facility with Square 1 and Oxford Finance and repaid the foregoing loans in full. The new credit facility provides for term loans from Oxford Finance of $10.0 million, a term loan from Square 1 of $6.0 million and a new revolving line of credit of up to $6.0 million. Our borrowing capacity under the line of credit is subject to borrowing base limitations related to our eligible accounts receivable. Interest on the term loans accrues at a fixed annual rate of 9.5%, while advances under the line of credit will continue to carry a variable interest rate equal to the greater of 6.25% or Square 1' s prime rate plus 3.0%. We are required only to make interest payments on the term loans through January 2014, and then repayments of principal and interest amounts due under the term loans will continue in monthly installments through July 2016. As of December 31, 2012, we had borrowed $5.0 million under the revolving line of credit, which matures in December 2013.

Borrowings under the credit facility are secured by substantially all of our assets other than our non-copyright intellectual property. The credit facility includes a number of financial and other covenants relating to, among other things, a monthly liquidity ratio and revenue requirements. We are currently in compliance with all required covenants.

In connection with the foregoing credit facilities, we have issued warrants to Oxford Finance to purchase an aggregate of 45,978 shares of our Series E redeemable convertible preferred stock at an exercise price of $4.35 per share and warrants to Square 1 to purchase an aggregate of 27,586 shares of our Series E redeemable convertible preferred stock and 88,793 shares of our Series F redeemable convertible preferred stock, in each case at an exercise price of $4.35 per share. Upon the closing of this offering, if not exercised, the warrants will automatically become warrants to purchase an aggregate of 78,741 shares of common stock at an exercise price of $8.97 per share.

Cash and Cash Equivalents

The following table summarizes our cash and cash equivalents, accounts receivable and cash flows for the periods indicated:

	As of and for the Year Ended December 31,			As of and for the Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
	(in thousands)				
Cash and cash equivalents	$12,045	$11,058	$12,483	$ 12,827	$ 10,279
Accounts receivable, net	3,363	4,194	5,626	5,414	8,057
Operating activities	1,637	1,143	96	(874)	2,408
Investing activities	(451)	(1,209)	(2,168)	(769)	(5,801)
Financing activities	970	(921)	3,497	3,412	1,190
Net increase (decrease) in cash and cash equivalents	$2,156	$(987)	$1,425	$ 1,769	$ (2,203)

Our cash and cash equivalents at December 31, 2011 and September 30, 2012 were held for working capital purposes. We do not enter into investments for trading or speculative purposes. Our policy is to invest any cash in excess of our immediate requirements in investments designed to preserve the principal balance and provide liquidity. Accordingly, our cash and cash equivalents are invested primarily in demand deposit accounts, certificates of deposit and money market funds that are currently providing only a minimal return.

Restricted cash, which totaled $1.5 million at December 31, 2011 and September 30, 2012 and is not included in cash and cash equivalents, consists primarily of certificates of deposit that secure letters of credit related to operating leases for our office and laboratory space.

Cash Flows for the Nine Months Ended September 30, 2011 and 2012

Operating Activities

Net cash provided by operating activities was $2.4 million during the nine months ended September 30, 2012, which included net income of $1.1 million and non-cash items of $2.1 million. The non-cash items consisted of $1.0 million in depreciation and amortization expense, $0.9 million in stock compensation expense and $0.2 million in expense incurred in the fair value remeasurement of the preferred stock warrant liability. We also had a net cash outflow of $0.7 million from changes in operating assets and liabilities during the period. The significant items in the changes in operating assets and liabilities included an increase in accounts receivable of $2.4 million, an increase in prepaid expenses of $0.1 million, a decrease in current liabilities of $0.2 million and an increase in long-term liabilities of $1.6 million. The increase in accounts receivable was due primarily to the growth in our revenues. The increase in long-term liabilities was related to straight line rent accrual and deferred tenant improvements allowance associated with our facility lease.

Net cash used in operating activities was $0.9 million during the nine months ended September 30, 2011, which included a net loss of $0.6 million, partially offset by non-cash items of $0.8 million. We also had a net cash outflow of $1.1 million from changes in operating assets and liabilities during the period. The change in operating assets and liabilities was primarily driven by an increase in our accounts receivable of $1.2 million as a result of the growth in our revenues.

Investing Activities

Net cash used in investing activities was $0.8 million and $5.8 million for the nine months ended September 30, 2011 and 2012, respectively. These amounts related primarily to purchases of property and equipment and costs incurred in connection with maintaining our patent and trademark portfolio. The purchases

of property and equipment during the first nine months of 2011 and 2012 were primarily for hardware components purchased from third-party manufacturers for the *Vantera* system. The purchases of property and equipment during the first nine months of 2012 consist primarily of $4.4 million of hardware components purchased from third-party manufacturers and enhanced IT infrastructure for the *Vantera* system and $1.4 million in facility renovation. The capitalized patent and trademark costs during the first nine months of 2011 and 2012 were primarily for pending domestic and international patent applications.

Financing Activities

Net cash provided by financing activities was $1.2 million during the nine months ended September 30, 2012, consisting primarily of $3.5 million in proceeds from borrowings under our line of credit, offset by term loan repayments of $1.6 million and $0.7 million of deferred offering costs incurred in connection with this offering.

Net cash provided by financing activities was $3.4 million during the nine months ended September 30, 2011, consisting primarily of $6.0 million in new proceeds from the refinancing of our long-term debt with Square 1 and $0.2 million in proceeds from exercises of stock options, offset by repayment in full of our prior long-term debt in the amount of $1.2 million and $1.6 million of deferred offering costs incurred in connection with this offering.

Cash Flows for the Years Ended December 31, 2009, 2010 and 2011

Operating Activities

Net cash provided by operating activities was $0.1 million during the year ended December 31, 2011, which included net loss of $0.5 million, partially offset by net non-cash items of $1.0 million. Non-cash items for the year ended December 31, 2011 consisted primarily of depreciation and amortization expense of $0.5 million and stock-based compensation expense of $0.7 million, a $0.1 million loss on extinguishment of debt, offset by a $0.3 million decrease in the fair value of our preferred stock warrant liability. We also had a net cash outflow from changes in operating assets and liabilities of $0.3 million during the year. The significant items in the changes in operating assets and liabilities included an increase of $1.4 million in accounts receivable, an increase of $0.1 million in prepaid expenses and a decrease of $0.1 million in other long-term liabilities, offset by an increase of $1.3 million in accounts payable, accrued liabilities and other current liabilities. The increase in accounts receivable was due primarily to the growth in our revenues. The increase in accounts payable during 2011 was due to higher expected bonus and commission payouts based on performance against target goals and increased spending associated with this offering.

Net cash provided by operating activities was $1.1 million during the year ended December 31, 2010, which included net income of $4.3 million, partially offset by net non-cash items of $(1.9) million. Non-cash items for the year ended December 31, 2010 consisted primarily of a $2.7 million gain on extinguishment of other long-term liabilities and a $0.4 million increase in the fair value of our preferred stock warrant liability, offset by depreciation and amortization expense of $0.6 million and stock-based compensation expense of $0.6 million. We also had a net cash outflow from changes in operating assets and liabilities of $1.3 million during the year. The significant items in the changes in operating assets and liabilities included an increase of $0.8 million in accounts receivable and an increase of $0.2 million in prepaid expenses, a decrease of $0.2 million in accounts payable and other current liabilities, and a decrease of $0.1 million in other long-term liabilities. The increase in accounts receivable was due primarily to the growth in our revenues.

Net cash provided by operating activities was $1.6 million during the year ended December 31, 2009, which included net income of $0.3 million and non-cash items of $1.5 million. Non-cash items for the year ended December 31, 2009 consisted primarily of depreciation and amortization expense of $0.8 million, stock-based compensation expense of $0.6 million and an increase in the fair value of our preferred stock warrant liability of

$0.2 million. We also had a net cash outflow from changes in operating assets and liabilities of $0.2 million during the year. The significant items in the changes in operating assets and liabilities included an increase of $0.3 million in accounts receivable partially offset by an increase of $0.2 million in accounts payable and other current liabilities. The increase in accounts receivable was due primarily to the growth in our revenues.

The growth in our number of *NMR LipoProfile* tests performed, the impact of other revenue and expenses and the timing and amount of future working capital changes will affect the future amount of cash used in or provided by operating activities.

Investing Activities

Net cash used in investing activities was $0.5 million, $1.2 million and $2.2 million for the years ended December 31, 2009, 2010 and 2011, respectively. The amounts related primarily to purchases of property and equipment and patent and trademark costs. The purchases of property and equipment during the years ended December 31, 2009 and 2011 were primarily for hardware components purchased from third-party manufacturers for the *Vantera* system not yet put into service, while the purchases of property and equipment during the year ended December 31, 2010 were primarily for computer and furniture for general office use due to increased headcount, leasehold improvements related to our facilities and equipment used in test production. The capitalized patent and trademark costs during the years ended December 31, 2009, 2010 and 2011 were primarily for pending domestic and international patent applications.

Financing Activities

Net cash provided by financing activities was $3.5 million during the year ended December 31, 2011, consisting primarily of proceeds from long-term debt of $6.0 million and net proceeds from exercises of stock options and warrants of $0.6 million, partially offset by cash outlays for deferred offering costs of $1.9 million and repayment of long-term debt of $1.2 million.

Net cash used in financing activities was $0.9 million during the year ended December 31, 2010, consisting primarily of repayment of long-term debt of $1.8 million, partially offset by net proceeds from exercises of stock options and warrants of $0.9 million.

Net cash provided by financing activities was $1.0 million during the year ended December 31, 2009, consisting primarily of proceeds from long-term debt of $2.5 million, partially offset by repayment of long-term debt of $1.5 million.

Operating and Capital Expenditure Requirements

We expect to incur substantial operating losses in the future and that our operating expenses will increase as we continue to expand our sales force and increase our marketing efforts to drive market adoption of the *NMR LipoProfile* tests, commercially launch our *Vantera* system and develop additional diagnostic tests. Our liquidity requirements have historically consisted, and we expect that they will continue to consist, of sales and marketing expenses, research and development expenses, capital expenditures, working capital, debt service and general corporate expenses. As demand for placements of our *Vantera* system increases from our clinical diagnostic laboratory customers, we anticipate that our capital expenditure requirements will also increase in order to build additional analyzers for placement. We expect that we will use a portion of the net proceeds of this offering, in combination with our existing cash and cash equivalents, for these purposes and for the increased costs associated with being a public company. The amount by which we increase our sales and marketing expenses and research and development expenses will be dependent upon the net proceeds of this offering and cannot currently be estimated. We expect that our planned expenditures will be funded from our ongoing operations, as well as from the proceeds of this offering.

We believe the net proceeds from this offering, together with the cash generated from operations, our current cash and cash equivalents and interest income we earn on these balances, will be sufficient to meet our anticipated cash requirements through at least the next 12 months. In the future, we expect our operating and capital expenditures to increase as we increase headcount, expand our sales and marketing activities and grow our customer base. As sales of our *NMR LipoProfile* test grow, we expect our accounts receivable balance to increase. Any such increase in accounts receivable may not be completely offset by increases in accounts payable and accrued expenses, which could result in greater working capital requirements.

If our available cash balances and net proceeds from this offering are insufficient to satisfy our liquidity requirements, we may seek to sell common or preferred equity or convertible debt securities or enter into an additional credit facility or seek other debt financing. The sale of equity and convertible debt securities may result in dilution to our stockholders, and those securities may have rights senior to those of our common shares. If we raise additional funds through the issuance of preferred stock, convertible debt securities or other debt financing, these securities or other debt could contain covenants that would restrict our operations. We may require additional capital beyond our currently anticipated amounts. Additional capital may not be available on reasonable terms, or at all.

Our estimates of the period of time through which our financial resources will be adequate to support our operations and the costs to support research and development and our sales and marketing activities 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 section "Risk Factors" of this prospectus. We have based our estimates on assumptions that may prove to be wrong and we could utilize our available capital resources sooner than we currently expect.

Our short- and long-term capital requirements will depend on many factors, including the following:

- the cost of our selling and marketing efforts;
- the rate of adoption of the *NMR LipoProfile* test in the marketplace;
- our ability to generate cash from operations;
- the rate of our progress in establishing additional coverage and reimbursement with third-party payors;
- our ability to control our costs and implement operating efficiencies;
- demand from clinical diagnostic laboratories for placements of our *Vantera* system at their facilities;
- the emergence of competing or complementary technological developments;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights or participating in litigation-related activities;
- the economic and other terms and timing of any collaborations, licensing or other arrangements into which we may enter; and
- the acquisition of complementary tests or technologies that we may undertake.

Critical Accounting Policies and Significant Judgments and Estimates

We have prepared our financial statements in accordance with U.S. generally accepted accounting principles. Our preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, expenses and related disclosures at the date of the financial statements, as well as revenues and expenses during the reporting periods. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could therefore differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in note 1 to our financial statements included later in this prospectus, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

We currently derive revenue from sales of our *NMR LipoProfile* test to clinical diagnostic laboratories and clinicians for use in patient care, from sales of ancillary tests for use in patient care requested in conjunction with the *NMR LipoProfile* test, and from research contracts.

Revenues from diagnostic tests for patient care, which consist of sales of the *NMR LipoProfile* test and sales of ancillary tests, are recognized on the accrual basis when the following revenue recognition criteria are met: (1) persuasive evidence that an arrangement exists; (2) services have been rendered or at the time final results are reported; (3) the fee is fixed or determinable; and (4) collectibility is reasonably assured. Testing services provided for patient care are covered by clinical diagnostic laboratories, programs with commercial insurance carriers, including managed care organizations, and various governmental programs, primarily Medicare.

Billings for diagnostic tests for patient care under governmental and physician-based programs are included in revenues net of contractual adjustments. These contractual adjustments represent the difference between the final settlement amount paid by the program and the estimated settlement amount based on either the list price for tests performed or the reimbursement rate set by commercial insurance carriers or governmental programs. Estimated contractual adjustments are updated either upon notification from payors as to changes in existing reimbursement rates, which are typically received prior to changes going into effect, or upon a material variance between the final settlement and the estimated contractual adjustment originally established when the revenues were recognized. To date, our final settlement adjustments have not been material.

Revenues from contract research arrangements are generally derived from studies conducted with academic institutions and pharmaceutical companies. The specific methodology for revenue recognition is determined on a case-by-case basis according to the facts and circumstances applicable to a given agreement. Our output, measured in terms of full-time equivalent level of effort or processing a set of diagnostic tests under a contractual protocol, typically triggers payment obligations under these agreements. Revenues are recognized as costs are incurred or diagnostic tests are processed. Contract research costs include all direct labor and material costs, equipment costs and fringe benefits. Advance payments received in excess of revenues recognized are classified as deferred revenue until such time as the revenue recognition criteria have been met.

Accounts Receivable

Accounts receivable are reported net of an allowance for uncollectible accounts. The process of estimating the collection of accounts receivable involves significant assumptions and judgments. Specifically, the accounts receivable allowance is based on management' s analysis of current and past due accounts, collection experience in relation to amounts billed, channel mix, any specific customer collection issues that have been identified and other relevant information. Our provision for uncollectible accounts is recorded as bad debt expense and included in general and administrative expenses. Historically, we have not experienced significant credit loss related to our customers or payors. Although we believe amounts provided are adequate, the ultimate amounts of uncollectible accounts receivable could be in excess of the amounts provided.

Stock-Based Compensation Expense

We have included stock-based compensation as part of our cost of revenues and our operating expenses in our statements of operations as follows:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
			(in thousands)		
Cost of revenues	$ 7	$ 21	$ 8	$ 5	$ 35
Research and development expense	135	45	155	113	359
Sales and marketing expense	153	137	217	156	198
General and administrative expense	285	447	271	216	289
Total	$ 580	$ 650	$ 651	$ 490	$ 881

We account for stock-based compensation arrangements with our employees, consultants and non-employee directors using a fair value method, which requires us to recognize compensation expense for costs related to all stock-based payments. To date, our only stock-based awards have been grants of stock options. The fair value method requires us to estimate the fair value of stock-based awards on the date of grant using an option pricing model. The fair value is then recognized as stock-based compensation expense over the requisite service period, which is the vesting period, of the award.

We calculate the fair value of stock-based compensation awards using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the input of subjective assumptions, including stock price volatility and the expected life of stock options. As a private company, we do not have sufficient history to estimate the volatility of our common stock price or the expected life of our options. We calculate expected volatility based on reported data for selected reasonably similar publicly traded companies within the diagnostic industry, or guideline peer group, for which the historical information is available. When selecting the public companies within the diagnostic industry, we selected companies with comparable characteristics to us, including enterprise value and financial leverage, and removed companies with significantly higher enterprise values, lower risk profiles or established positions within the industry. We also selected companies with historical share price volatility information sufficient to meet the expected life of our stock options. The historical volatility data was computed using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of our stock options. We will continue to use the guideline peer group volatility information until the historical volatility of our common stock is relevant to measure expected volatility for future option grants.

We determine the average expected life of stock options according to the "simplified" method. Under this method, the expected term is calculated as the average of the time-to-vesting and the contractual life of the option. The assumed dividend yield is based on our expectation that we will not pay dividends in the foreseeable future, which is consistent with our history of not paying dividends. We determine the risk-free interest rate by using the weighted average assumption equivalent to the expected term based on the U.S. Treasury yield curve in effect as of the date of grant. We estimate forfeitures based on our historical analysis of actual stock option forfeitures. Although, we estimate forfeitures based on historical experience, actual forfeitures may differ. If actual results differ significantly from these estimates, stock-based compensation expense and our statements of operations could be materially impacted. We would record an adjustment for the difference in the period that the options vest.

For the years ended December 31, 2009, 2010, 2011 and the nine months ended September 30, 2012, we estimated the fair value of stock options at their grant dates using the following assumptions:

	Year Ended December 31,			Nine Months Ended
	2009	2010	2011	September 30, 2012
Expected dividend yield	0.0 %	0.0 %	0.0 %	0.0 %
Risk-free interest rate	2.1 %	2.0 %	2.0 %	0.8 %
Expected volatility	46.3 %	49.9 %	50.3 %	51.2 %
Expected life (in years)	5.6	5.6	5.6	5.6

There is a high degree of subjectivity involved when using option-pricing models to estimate stock-based compensation. There is currently no market-based mechanism or other practical application to verify the reliability and accuracy of the estimates stemming from these valuation models, nor is there a means to compare and adjust the estimates to actual values. Although the fair value of stock-based awards is determined using an option-pricing model, that value may not be indicative of the fair value that would be observed in a market transaction between a willing buyer and willing seller. If factors change and we employ different assumptions when valuing our options, the compensation expense that we record in the future may differ significantly from what we have historically reported.

Determination of the Fair Value of Common Stock on Grant Dates

We are a privately held company with no active public market for our common stock. Therefore, management has for financial reporting purposes periodically determined the estimated per share fair value of our common stock at various dates using contemporaneous valuations consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held Company Equity Securities Issued as Compensation," also known as the Practice Aid. We performed these contemporaneous valuations as of October 31, 2008, December 31, 2009, November 30, 2010, April 30, 2011, September 30, 2011, December 31, 2011, March 31, 2012, June 30, 2012 and September 30, 2012. In conducting these contemporaneous valuations, management considered all objective and subjective factors that it believed to be relevant in each valuation conducted, including management' s best estimate of our business condition, prospects and operating performance at each valuation date. Within the contemporaneous valuations performed by our management, a range of factors, assumptions and methodologies were used. The significant factors included:

- the fact that we are a privately held diagnostics company with illiquid securities;
- our historical operating results;
- our discounted future cash flows, based on our projected operating results;
- valuations of comparable public companies;
- the potential impact on common stock as a result of liquidation preferences of preferred stock for certain valuation scenarios;
- our stage of development and business strategy;
- the likelihood of achieving a liquidity event for shares of our common stock, such as an initial public offering of our common stock or sale of our company, given prevailing market conditions; and
- the state of the initial public offering market for similarly situated privately held diagnostics companies.

The dates of our contemporaneous valuations have not always coincided with the dates of our stock-based compensation grants. In such instances, management' s estimates have been based on the most recent contemporaneous valuation of our shares of common stock and its assessment of additional objective and subjective factors it believed were relevant and which may have changed from the date of the most recent contemporaneous valuation through the date of the grant. In addition, our management performed retrospective valuations as of September 30, 2009, June 30, 2010 and December 31, 2010 using similar methodologies as were used in the contemporaneous valuations. These retrospective valuations are discussed in more detail below.

There are significant judgments and estimates inherent in these contemporaneous and retrospective valuations. These judgments and estimates include assumptions regarding our future operating performance, the time to completing an initial public offering or other liquidity event, and the determinations of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net (loss) income and net (loss) income per common share could have been significantly different.

The following table summarizes by grant date the number of shares of common stock subject to options granted from January 1, 2009 through the date of this prospectus, as well as the associated per share exercise price and the per share estimated fair value of the underlying common stock and the intrinsic value, if any, per share.

Grant Date	Number of Options Granted	Per Share Exercise Price	Estimated Per Share Fair Value of Common Stock (1)		Intrinsic Value Per Share
January 1, 2009	1,697	$ 2.46	$ 2.46		$ –
February 6, 2009	243,152	2.50	2.50		–
February 11, 2009	9,700	1.88	2.50	(2)	0.62
June 18, 2009	37,056	2.50	2.50		–
July 9, 2009	24,250	1.88	2.50	(2)	0.62
September 25, 2009	33,060	2.50	2.50		–
November 13, 2009	9,700	1.88	2.50	(2)	0.62
January 1, 2010	1,697	5.63	5.63		–
January 15, 2010	72,749	5.63	5.63		–
April 14, 2010	110,510	5.63	5.63		–
June 23, 2010	22,989	5.63	5.63		–
September 3, 2010	24,250	4.23	5.63	(2)	1.40
October 8, 2010	9,700	4.23	5.63	(2)	1.40
October 8, 2010	111,065	5.63	5.63		–
October 28, 2010	19,400	5.63	5.63		–
April 8, 2011	211,990	6.89	6.89		–
August 1, 2011	46,753	9.84	9.84		–
November 18, 2011	95,836	9.02	9.02		–
May 18, 2012	192,783	11.45	11.45		–
August 2, 2012	73,138	11.45	11.45		–
August 7, 2012	29,100	11.12	11.12		–
November 28, 2012	62,177	12.81	12.81		–
December 5, 2012	21,340	12.81	12.81		–

(1) We reassessed the fair value of our common stock subsequent to the grant date of some of these options. As described below, management determined that, had we used the reassessed value of the common stock for financial reporting purposes, the effect would not have been material to our operating results. As a result, no change was made to the exercise price or the estimated fair market value of the common stock as reflected in this table.

(2) These were option grants to non-employee directors that, in accordance with our non-employee director compensation plan, were granted at an exercise price below fair market value, but no less than 75% of the fair market value of the common stock on the date of grant.

Common Stock Valuation Methodologies

Our management estimated our enterprise value as of the various valuation dates using a combination of the income and market approaches, which are both acceptable valuation methods in accordance with the Practice Aid. The income approach utilized the discounted cash flow, or DCF, methodology based on management' s financial forecasts and projections. The market approach utilized

the guideline, or comparable, company and the guideline transaction methodologies based on comparable public companies' equity pricing and comparable acquisition transactions. Each valuation also reflects a marketability discount, resulting from the illiquidity of our common stock.

As provided in the Practice Aid, there are several approaches for allocating enterprise value of a privately held company among the securities held in a complex capital structure. The possible methodologies include the probability-weighted expected return, or PWER, method, the option-pricing method and the current value method. The current value method is more applicable to an early-stage company, and therefore, we have not used it in valuing our common stock.

Contemporaneous Valuation as of October 31, 2008

We performed a contemporaneous valuation of our common stock as of October 31, 2008 and determined the fair market value to be $2.50 per share as of that date. To estimate our enterprise value, we used the DCF methodology for the income approach and a combination of the guideline company methodology and the guideline transaction methodology for the market approach.

For the DCF methodology, management prepared detailed annual projections of future cash flows through 2013 and applied a terminal value assumption multiple to the final year to estimate the total value of the cash flows beyond the final year. Our projections of future cash flows were based on our estimated net debt-free cash flows. These cash flows were then discounted to the valuation date at an estimated weighted average cost of capital of 25%. We did not apply any discount for lack of control. Management believes that the procedures employed in the DCF methodology, including estimating the net debt-free cash flows, weighted average cost of capital, discount rate and terminal multiple, were reasonable and consistent with the Practice Aid. For example, the Practice Aid provides that venture-backed companies of a size and stage of development similar to us typically have a cost of equity capital in the 20% to 30% range, and our capital structure at the valuation date consisted almost exclusively of equity rather than debt. Our cost of equity capital was derived by applying the widely used capital asset pricing model, or CAPM. Based on our projected operating results and assuming a discount rate of 25% and a terminal value revenue multiple for 2013 at the third quartile of the comparable companies under the guideline company methodology, the DCF methodology yielded an enterprise value of $63.0 million.

For the guideline company methodology, we determined, as of the valuation date, a range of trading multiples for a group of 19 comparable public companies, based on trailing 12 months revenue. We focused on companies in the *in vitro* diagnostics and lab services industry that, at the time, we considered to be most comparable to us based on size and business model. The range of multiples for the comparable public companies was between 0.4x and 6.7x trailing 12 months revenue. At the time, we had received FDA clearance for our existing NMR clinical analyzer, but unlike many of the public company comparables, we did not yet have positive earnings before interest, taxes, depreciation and amortization, or EBITDA. As a result, we selected a multiple at the median of the range. When applied to our projected 2008 revenue, the guideline company methodology yielded an enterprise value of $56.6 million.

For the guideline transaction methodology, we determined a range of implied revenue multiples reflecting the ratio of the purchase price paid in the transactions to the target companies' trailing 12 months revenue prior to the acquisition date for 13 comparable companies in the *in vitro* diagnostics and lab services industry that had recently been sold. We selected a multiple at the first quartile, or low end, of the range. After applying this multiple to our projected 2008 revenue, the guideline transaction methodology yielded an enterprise value of $64.7 million.

The valuations resulting from the foregoing methodologies were then combined to determine an estimated overall enterprise value, which was then reduced by the value of our debt (net of cash) to estimate the aggregate equity value available to our common and preferred equity holders. In determining our enterprise value, we weighted the income and market approaches equally. Within the market approach, we weighted the guideline companies and guideline transactions methodologies equally. After weighting the various approaches and adding back our cash and debt balances, we determined that our weighted enterprise value was $71.7 million.

For the October 31, 2008 contemporaneous valuation, we allocated the weighted enterprise value using the option-pricing method, which treats the rights of the holders of preferred and common stock as equivalent to that of call options on any value of the enterprise above certain break points of value, based on the liquidation preferences of the holders of preferred stock, as well as their rights to participation and conversion. Accordingly, the value of our common stock was determined by estimating the value of its portion of each of these call option rights. In order to determine the break points, we made estimates of the anticipated timing of a potential liquidity event and estimates of the volatility of our equity securities. The anticipated timing was based on our plans toward the liquidity event and on our board of directors' judgment. Estimating the volatility of the stock price of a privately held company is complex because there is no readily available market for the shares. We estimated the volatility of our stock based on available information on volatility of stocks of publicly traded companies in the industry.

After deducting the value of indebtedness (net of cash), preferred stock and other common share equivalents and applying a marketability discount of 23%, the estimated value attributable to common stockholders was $2.50 per share, which we determined to be the fair market value of our common stock as of October 31, 2008. The discount for lack of marketability reflects the lower value placed on securities that are not freely transferable, as compared to those that trade frequently in an established market. The marketability discount was based on an at-the-money Black-Scholes put option analysis, assuming a dividend yield of zero; a maturity of 1.6 years; a risk-free rate of 1.4%, which was equal to the rate on U.S. Treasury bills matching the expected term; and an annualized volatility of 49%, which was the average volatility of the comparable public companies over a period equal to the expected term.

Between January 1, 2009 and September 25, 2009, we granted new stock options with an exercise price of $2.50 per share. Also in September 2009, we offered to reprice our employees' outstanding options with exercise prices of at least $3.88 per share to reduce their exercise prices to $2.50 per share. Each participant who elected to have their options repriced forfeited 25% of the number of shares underlying his or her original option. The repricing was effected in October 2009, and accordingly, we recorded the incremental stock-based compensation for such grants at that time.

Retrospective Valuation as of September 30, 2009

In connection with the preparations for this offering, we performed a retrospective valuation of our common stock as of September 30, 2009, using similar methodologies as were used in the October 31, 2008 valuation. The changes in our assumptions from those used in the October 31, 2008 contemporaneous valuation were as follows:

DCF methodology. We updated our detailed annual projections of future cash flows through 2014. Based on our projected operating results and assuming a discount rate of 25% and an assumed terminal value multiple applied to projected revenue for 2014, the DCF methodology yielded an enterprise value of $103.2 million. Our assumptions with respect to our weighted average cost of capital were substantially the same as those used in the October 31, 2008 valuation. The terminal multiple applied to 2014 projected revenues was lower than that used at October 31, 2008. We selected a multiple at the first quartile of the companies in the updated guideline company methodology, rather than the third quartile, reflecting our potentially slower growth.

Guideline company / market multiple methodology. We modified the list of comparable public companies to select 15 companies in the *in vitro* diagnostics and lab services space. Of these, four were classified as CLIA-based laboratory comparables, six were classified as high-growth diagnostic companies, and five were classified as large capitalization comparables. Of the 19 companies that had been used in the October 31, 2008 analysis, 12 were removed because their size or business model was considered to be no longer comparable to ours, or because they had been acquired or were traded over the counter. Eight new diagnostics and lab services companies were added.

With the new list of 15 comparable companies, we determined, as of the valuation date, a range of trading multiples based on estimates of projected full year revenue for 2009 and projected revenues for each of 2010 and 2011. We selected multiples for our projected revenues for 2009, 2010 and 2011 based on the

first quartile of the range. We believed a multiple at the low end of the range was warranted to reflect potentially lower growth and margins relative to our peers. When applied to our projected three-year revenues, the market multiple methodology yielded an enterprise value of $97.3 million.

Guideline transactions methodology. We reviewed three additional acquisition transactions during 2009 in which the target company was in our industry space. After applying the average multiple of trailing 12 months revenue for the target companies to our projected 2009 through 2011 revenues, the guideline transaction methodology yielded an enterprise value of $104.9 million.

After weighting the various approaches in the same manner as in the prior contemporaneous valuation, and adding back our cash and debt balances, we determined that our weighted enterprise value was $114.0 million as of September 30, 2009.

After deducting the value of indebtedness (net of cash), preferred stock and other common share equivalents and applying a marketability discount of 16%, the estimated value of our common stock was $4.69 per share. As with the October 31, 2008 contemporaneous valuation, the marketability discount was based on an at-the-money Black-Scholes put option analysis, with updated assumptions as follows: a dividend yield of zero; a maturity of 1.5 years; a risk-free rate of 0.7%; and an annualized equity volatility of 79% and asset volatility of 51%, which were the average equity and asset volatilities of the comparable public companies over a period equal to the expected term.

The primary factors that supported the increase in the fair market value of our common stock from $2.50 per share at October 31, 2008 to $4.69 per share at September 30, 2009 were:

the increase in our projected revenues from $28.3 million for 2008 to $34.7 million for 2009 and $41.3 million for 2010;

the increase in the valuations of the publicly traded comparable companies and the corresponding increases in their revenue multiples; and

the overall improvement in the capital markets during the first three quarters of 2009.

We made two option grants for a total of 42,760 shares from September 2009 through December 2009 based on the prior valuation of $2.50 per share. We also conducted our stock option repricing in October 2009 based on the prior valuation of $2.50 per share. We determined that, had we used the higher September 30, 2009 value of the common stock for financial reporting purposes, the effect would not have been material and, therefore, no adjustment to our financial statements was necessary.

Contemporaneous Valuation as of December 31, 2009

Subsequent to September 30, 2009, management and our board of directors determined that it was probable that the commercial launch of the *Vantera* system would be completed in the near term and, therefore, an initial public offering or sale of the company was substantially more likely to be pursued. As a result, management began using the PWER method outlined in the Practice Aid to allocate the weighted enterprise value between common stock and preferred stock. Under the PWER method, shares of preferred stock and common stock are valued separately based on the probability-weighted average expected future returns, considering various future outcomes of our operations and liquidity events. The future outcomes we considered for valuations as of December 31, 2009 and thereafter included:

an initial public offering, or IPO, of our common stock;

a merger or sale of our company;

liquidation of our company with no value to the common stock; and

continuing operations as a viable private company.

The valuation methodologies employed in connection with the continued operations scenario were consistent with the valuation methodologies we used in our previous contemporaneous valuations as of October 31, 2008 and September 30, 2009.

As of December 31, 2009, we had not commenced a formal process to pursue an IPO of our common stock or a sale of our company, although we believed that they were realistic eventual outcomes. We assigned probability weights to potential future outcomes as follows:

50% to an IPO in the middle of 2011;

35% to a sale of the company at the end of 2013;

10% to the continued operations scenario; and

5% to the liquidation scenario.

Continuing Operations Scenario. The changes in our assumptions from those used in the September 30, 2009 contemporaneous valuation were as follows:

DCF methodology. We updated our detailed annual projections of future cash flows through 2015. Based on our projected operating results and assuming a discount rate of 25% and the same terminal value multiple as used in the previous valuation applied to our projected revenue for 2015, the DCF methodology yielded an enterprise value of $104.5 million. Our assumptions with respect to our weighted average cost of capital were substantially the same as those used in the September 30, 2009 valuation. We also evaluated the comparable companies for a terminal EBITDA multiple and selected an EBITDA multiple in line with the average trailing 12 months EBITDA multiple for the CLIA-based and high-growth diagnostics companies. Applying that terminal multiple to our projected 2015 EBITDA also yielded an enterprise value of $104.5 million.

Guideline company / revenue market multiple methodology. We used the same 15 comparable companies in the *in vitro* diagnostics and lab services space. We selected multiples for our trailing 12 months revenues and for our projected revenues for 2010, 2011 and 2012, which in each case were based on the first quartile of the comparable company range. As was the case with the previous valuation, we believed that a multiple at the low end of the range was warranted to reflect potentially lower growth and margins relative to our peers. When applied to our trailing 12 months revenue and projected three-year revenues, the market multiple methodology yielded an enterprise value of $102.9 million.

Guideline company / EBITDA market multiple methodology. In addition to determining a range of revenue multiples among the comparable companies, we also determined a range of EBITDA multiples for projected 2011 and 2012 EBITDA, as we expected to have positive EBITDA for the first time in those years. The multiple selected for 2011 was based on the high multiple within the comparable companies group, given our projected EBITDA growth for that year. The multiple selected for 2012 was based on the mean of the group, as we expected our EBITDA to stabilize in that year. When applied to our projected 2011 and 2012 EBITDA, the market EBITDA multiple methodology yielded an enterprise value of $86.9 million.

Guideline transactions methodology. We reviewed 11 of the same acquisition transactions that were part of the earlier valuations and determined a range of both revenue multiples and EBITDA multiples. We selected a revenue multiple for our trailing 12 months revenue and our projected 2010 through 2012 revenues based on the first quartile of the comparable transaction range. We selected an EBITDA multiple for projected 2011 and 2012 EBITDA that was close to the median for the comparable transactions. After applying these multiples to our trailing and projected revenues and our projected EBITDA, the guideline transaction methodology yielded enterprise values of $100.4 million based on the revenue multiple and $106.4 million based on the EBITDA multiple.

In determining our enterprise value, as with the October 31, 2008 valuation, we weighted the income and market approaches equally, and within the market approach, we weighted the guideline companies and guideline transactions methodologies equally. Within each of the guideline companies and guideline transactions methodologies, we weighted the revenue and EBITDA multiples equally. After weighting the various approaches and adding back our cash and debt balances, we determined that our weighted enterprise value was $110.8 million as of December 31, 2009. After deducting debt and preferred stock liquidation preferences and a marketability discount of 25%, the estimated value attributable to common stockholders was $4.23 per share under the continuing operations scenario.

IPO Scenarios. We assumed two IPO scenarios for the middle of 2011, which we weighted equally. Under the first "high" scenario, we assumed that we had obtained 510(k) clearance of the *Vantera* system at the end of 2010 and that Vantera was well-received by customers willing to provide favorable references, that we got reimbursement for the *NMR LipoProfile* test from managed care companies, and that we developed more diagnostic tests for our platform. For the "low" scenario, we assumed that one or more of the foregoing assumptions did not materialize.

For the high IPO scenario, we applied a multiple to our projected 2011 EBITDA based on the high multiple for the last 12 months of EBITDA among the comparable companies described above. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $150.0 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 25%, which yielded a per share value of $7.51 for this scenario.

For the low IPO scenario, we applied a multiple based on the average trailing 12 months EBITDA multiple for the CLIA-based and high-growth diagnostics comparables. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $108.2 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 25%, which yielded a per share value of $5.53 for this scenario.

Sale Scenarios. We assumed two sale scenarios for the end of 2013, which we weighted equally. The assumptions for the "high" and "low" sale scenarios were similar to those of the corresponding IPO scenarios.

For the high sale scenario, we applied a multiple to our projected 2013 EBITDA, which was based on the average multiple for the last 12 months of EBITDA among the target companies in the guideline transactions methodology described above. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $234.4 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 25%, which yielded a per share value of $6.58 for this scenario.

For the low sale scenario, we applied a multiple based on the low end of the range of trailing 12 months EBITDA multiples for the target companies in the comparable transactions. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $162.4 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 25%, which yielded a per share value of $4.62 for this scenario.

Liquidation Scenario. Under this scenario, we assumed that we were unable to raise additional funding and that we had insufficient cash to continue our operations as of the end of 2011. We also assumed that creditors would be repaid and preferred stockholders would be paid a portion of their liquidation preferences and that no value would be available for distribution to the holders of common stock.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the two sale scenarios, the continuing operations scenario and the liquidation scenario, we estimated the fair market value of our common stock to be $5.63 per share as of December 31, 2009. The marketability discount of 25% applied to

each of the IPO, sale and continuing operations scenarios was based upon a review of Rule 144 restricted stock studies, considering the assumed timing to each of the exit scenarios.

The primary factors that supported the increase in the fair market value of our common stock from $4.69 per share at September 30, 2009 to $5.63 per share at December 31, 2009 were:

- continued revenue growth from increased sales of our *NMR LipoProfile* test;
- the steps we had taken toward completing internal and external validation of the *Vantera* system required for commercial launch, which was more likely to result in a higher valuation of the company in an IPO or sale scenario;
- increased venture-backed company exit activity during the fourth quarter of 2009; and
- continued improvement in the capital markets during the fourth quarter of 2009.

We used this valuation of $5.63 per share for all option grants during 2010.

Retrospective Valuation as of June 30, 2010

We performed a retrospective valuation as of June 30, 2010 using the same methods as were used in the December 31, 2009 valuation, with updated probability weights to the potential future outcomes and updates of the assumptions used in each methodology. As of June 30, 2010, we still had not commenced a formal process to pursue an IPO or a sale of our company, although we continued to believe that they were highly likely outcomes. We assigned probability weights to potential future outcomes as follows:

- 30% to an IPO at the end of 2011;
- 30% to an IPO at the end of 2012;
- 17.5% to a sale of the company at the end of 2011;
- 17.5% to a sale of the company at the end of 2012; and
- 5% to the liquidation scenario in which no value is available for distribution to the holders of common stock.

We no longer attributed any likelihood to the continued operations as a private company scenario beyond the end of 2012.

IPO Scenarios. We assumed two IPO scenarios for 2011 and 2012, which we weighted equally. The 2011 IPO scenario was based on the same assumptions as set forth in the prior valuation for the “high” IPO scenario, except that we assumed that we would obtain 510(k) clearance of the *Vantera* system in early 2012. The 2012 IPO scenario was based on the same assumptions as set forth in the prior valuation for the “low” IPO scenario, or that we would face delays in software development.

For the 2011 IPO scenario, we applied a multiple to our projected 2011 revenue that was between the first quartile and the median trailing 12 months revenue multiple for the comparable companies, since we did not expect FDA clearance until 2012 and expected potentially lower growth than our publicly traded peers. The list of comparable companies was the same as those used in the previous valuation. Under this 2011 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $131.4 million. We then discounted this value back to the valuation date using a discount rate of 26% and applied a marketability discount of 20%, which yielded a per share value of $6.54 for this scenario. The discount rate we used changed slightly, from 25% to 26%, as a result of changes in the valuations of the comparable companies that impacted our assumptions used in the CAPM.

For the 2012 IPO scenario, we applied a multiple of projected 2011 revenue that was in line with the median trailing 12 months revenue multiple for the comparable companies. This scenario assumes that we would receive better market traction once FDA clearance is received and the *Vantera* system has a proven history at clinical diagnostic laboratories. Under this 2012 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $186.4 million. We then discounted this value back to the valuation date using a discount rate of 26% and applied a marketability discount of 20%, which yielded a per share value of $7.32 for this scenario.

Sale Scenarios. We assumed two sale scenarios for 2011 and 2012, which we weighted equally. The 2011 sale scenario assumes that the IPO window is not open or we receive an attractive acquisition offer. The 2012 sale scenario assumes that one or more of the assumptions in the 2011 IPO scenario do not materialize but that we receive an attractive acquisition offer at a later date.

For the 2011 sale scenario, we applied a multiple to our projected 2011 revenue that was equal to the median trailing 12 months revenue multiple among the target companies evaluated in the guideline transactions methodology. We reviewed four comparable acquisition transactions during 2009 and early 2010, in which the target company competed in our industry or provided a service that was similar to ours. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $70.3 million. We then discounted this value back to the valuation date using a discount rate of 26% and applied a marketability discount of 20%, which yielded a per share value of $3.68 for this scenario.

For the 2012 sale scenario, we applied a multiple to our projected 2012 revenue that was at the higher end of the range of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $160.4 million. We then discounted this value back to the valuation date using a discount rate of 26% and applied a marketability discount of 20%, which yielded a per share value of $6.31 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the two sale scenarios and the liquidation scenario, we estimated the fair market value of our common stock to be $5.92 per share as of June 30, 2010.

We reassessed stock option grants made from June 2010 through October 2010 and determined that, had we used the higher June 30, 2010 value of the common stock for financial reporting purposes, the effect would not have been material and, therefore, no adjustment to our financial statements was necessary.

Contemporaneous Valuation as of November 30, 2010

During the quarter ended December 31, 2010, we began preparations for a possible IPO by beginning discussions with potential underwriters. We planned to file a registration statement for an IPO in the latter part of the second quarter of 2011. However, we also determined that there continued to be a significant possibility of a sale of the company. Therefore, we performed a contemporaneous valuation as of November 30, 2010, using the same methodologies as in the June 30, 2010 valuation. We also assigned the same probability weights to future outcomes as for the June 30, 2010 valuation.

IPO Scenarios. We assumed the same two IPO scenarios for 2011 and 2012, which we again weighted equally.

For the 2011 IPO scenario, we applied the same multiple to our projected 2011 revenue as in the prior valuation, which was at the first quartile of trailing 12 months revenue multiple for the comparable companies, since we did not expect FDA clearance for *Vantera* until 2012 and the possibility for lower growth when

compared to publicly traded peers. The list of comparable companies changed slightly from that used for the prior valuation. We identified 16 public companies classified as molecular diagnostics companies, other growth diagnostic players, or high-growth med-tech companies. Under this 2011 IPO scenario, the value available for distribution to common stockholders was estimated to be $130.6 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 20%, which yielded a per share value of $7.24 for this scenario. The discount rate we used changed slightly, from 26% back to 25%, as a result of changes in the valuations of the comparable companies that impacted our assumptions used in the CAPM.

For the 2012 IPO scenario, we applied a multiple of projected 2011 revenue that was between the first quartile and the median trailing 12 months revenue multiple for the comparable companies. Under this 2012 scenario, the value available for distribution to common stockholders was estimated to be $185.6 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 20%, which yielded a per share value of $8.11 for this scenario.

Sale Scenarios. We assumed two sale scenarios for 2011 and 2012, which we weighted equally. These scenarios were the same as those used in the June 30, 2010 valuation, including a scenario in which we face delays in software development, which would most likely result in delayed FDA clearance of *Vantera* and a later exit event. The 2012 sale scenario also assumed that we receive better market traction once FDA clearance for *Vantera* is received and the *Vantera* system has proven successful after placement in clinical diagnostic laboratories.

For the 2011 sale scenario, we applied a multiple to our projected 2011 revenue that was equal to the median trailing 12 months revenue multiple among the target companies evaluated in the guideline transactions methodology. We reviewed nine comparable acquisition transactions during 2009 and early 2010, in which the target company competed in our industry or provided a service that was similar to ours. Under this scenario, the value available for distribution to common stockholders was estimated to be $108.4 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 20%, which yielded a per share value of $6.03 for this scenario.

For the 2012 sale scenario, we applied a multiple to our projected 2012 revenue that was between the first quartile and the average of the range of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology. Under this scenario, the value available for distribution to common stockholders was estimated to be $160.4 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 20%, which yielded a per share value of $6.99 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the two sale scenarios and the liquidation scenario, we estimated the fair market value of our common stock to be $6.89 per share as of November 30, 2010. We began using this valuation for stock options granted after that date, the first of which were granted in April 2011. For the November 30, 2010 contemporaneous valuation, we used a Black-Scholes at-the-money put option analysis with normalized equity volatilities, with a maximum marketability discount of 20% based upon the stage of our company.

The primary factors that supported the increase in the fair market value of our common stock from $5.63 per share at December 31, 2009 to $6.89 per share at November 30, 2010 were:

- double-digit revenue and unit growth from increased sales of our *NMR LipoProfile* test and corresponding improvement in our EBITDA during 2010;
- a resulting increase in our revenue projections for future years, which impacted the implied IPO valuation for 2012 as compared to 2011;
- further development of the *Vantera* system, including placement of the system at third-party locations in support of an expected regulatory submission;

an increase in the weighting of the higher-value IPO scenarios from 50% to 60%, with a corresponding reduction in the lower-value continued operations scenario from 10% to zero;

increased mergers and acquisitions exit transaction volume during 2010 for venture-backed companies; and

increases in the valuations of the comparable public companies.

Retrospective Valuation as of December 31, 2010

We performed a subsequent retrospective valuation as of December 31, 2010 to confirm that there had not been any significant change in valuation since November 30, 2010. We determined that no changes were warranted in any of the outcome scenarios, their respective weightings, or the multiples used. Due to the passage of time between November 30 and December 31, 2010, the impact of the discount rate on our valuation calculations was less, which resulted in our estimate of the fair market value of our common stock increasing slightly to $7.02 per share as of December 31, 2010. We granted options to purchase an aggregate of 211,990 shares of common stock in April 2011 using the valuation of $6.89 per share from the November 30, 2010 contemporaneous valuation. We determined that, had we used the higher December 31, 2010 value of the common stock for financial reporting purposes, the effect would not have been material and, therefore, no adjustment to our financial statements was necessary.

Contemporaneous Valuation as of April 30, 2011

During the four months ended April 30, 2011, we continued preparations for an IPO, including the selection of underwriters and outside legal counsel. On May 9, 2011, management, our external legal counsel, our independent registered public accounting firm, the proposed underwriters and their external legal counsel held an organizational meeting to formally begin the IPO process and underwriter due diligence process. We continued to expect to file a registration statement for an IPO by the end of the second quarter of 2011. We assigned probability weights to potential future outcomes as follows:

50% to an IPO at the end of the third quarter of 2011;

25% to an IPO at the end of the second quarter of 2012;

10% to a sale of the company at the end of the third quarter of 2011;

10% to a sale of the company at the end of the second quarter of 2012; and

5% to the liquidation scenario in which no value is available for distribution to the holders of common stock.

IPO Scenarios. We assumed two IPO scenarios for 2011 and 2012, which we weighted two-thirds to 2011 and one-third to 2012. The 2011 IPO scenario included the same assumptions as in the 2011 IPO scenario used in the November 30, 2010 contemporaneous valuation, except for an acceleration of the IPO to the end of the third quarter rather than at the end of 2011. The 2012 IPO scenario also included the same assumptions as in the 2012 IPO scenario used in the November 30, 2010 contemporaneous valuation, except for an acceleration of the IPO to the end of the third quarter rather than at the end of 2012.

For the 2011 IPO scenario, we applied the same multiple to our projected 2011 revenue as in the prior contemporaneous valuation, which was between the low end and the first quartile of trailing 12 months revenue multiple for the comparable companies, since we did not expect FDA clearance for *Vantera* until 2012 and expected lower growth than our publicly traded peers. We used the same 16 comparable public companies as were used in the prior contemporaneous valuation. Under this 2011 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $125.0 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 10%, which yielded a per share value of $10.00 for this scenario. Our assumptions with respect to our weighted average cost of capital were substantially the same as those used in the November 30, 2010 valuation.

For the 2012 IPO scenario, we applied a multiple of projected 2012 revenue that was also between the low end and the first quartile of trailing 12 months revenue multiple for the comparable companies. Under this 2012 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $182.4 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 10%, which yielded a per share value of $11.94 for this scenario.

Sale Scenarios. We assumed two sale scenarios for 2011 and 2012, which we weighted equally. These scenarios were the same as those used in the November 30, 2010 contemporaneous valuation.

For the 2011 sale scenario, we applied a multiple to our projected 2011 revenue that was equal to the median trailing 12 months revenue multiple among the target companies evaluated in the guideline transactions methodology. We reviewed 11 comparable acquisition transactions during 2009 and 2010, in which the target company competed in our industry or provided a service that was similar to ours, seven of which had enough information to calculate exit multiples. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $102.6 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 10%, which yielded a per share value of $8.42 for this scenario.

For the 2012 sale scenario, we applied a multiple to our projected 2012 revenue that was at the third quartile of the range of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $152.0 million. We then discounted this value back to the valuation date using a discount rate of 25% and applied a marketability discount of 10%, which yielded a per share value of $10.11 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the two sale scenarios and the liquidation scenario, we estimated the fair market value of our common stock to be $9.84 per share as of April 30, 2011. We began using this valuation for stock options granted after that date, specifically those granted on August 1, 2011.

We used a marketability discount of 10% for each of the exit scenarios. As with the prior valuations, we used a Black-Scholes at-the-money put option analysis, which yielded a 12% discount. We also considered the option-based approach in the Finnerty model, which provides that the discount on a privately-held security can be estimated by the value of an “average-strike” put option conveying the right to sell at an average price during the life of the option. The Finnerty model, which works under the assumption that investors do not have the unique ability to time the market, yielded a 7% discount. The selected marketability discount of 10% was in the range of the two models.

The primary factors that supported the increase in the fair market value of our common stock from $6.89 per share at November 30, 2010 to $9.84 per share at April 30, 2011 were:

- closer proximity to the date of the expected exit event, which decreased the impact of the discount rate on the estimated value;
- a lower discount for lack of marketability, as described above;
- an increase in the estimated probability of an IPO, which generally results in a higher valuation of the common stock due to the conversion of preferred stock and resulting elimination of liquidation preferences, from 60% to 75%, and a corresponding reduction in the probability of a sale transaction from 35% to 20%;
- slightly higher revenue multiples for the comparable public companies as a result of increases in their market valuations; and
- a strong market for initial public offerings during the first quarter of 2011.

Contemporaneous Valuation as of September 30, 2011

In June 2011, we commenced the process of filing a registration statement for an IPO. There were no single milestone events that would have caused the valuation of our common stock to change from April 2011 through September 2011. However, the stock prices of the comparable companies, as well as various market indices, decreased significantly between July 1, 2011 to December 31, 2011 due to uncertainty associated with general economic and political conditions in the United States and abroad. As a result, we performed a contemporaneous valuation of our common stock as of September 30, 2011 and assigned probability weights to potential future outcomes as follows:

20% to an IPO by the end of the fourth quarter of 2011;

50% to an IPO by the end of the fourth quarter of 2012;

25% to a sale of the company by the end of the fourth quarter of 2012; and

5% to the liquidation scenario in which no value is available for distribution to the holders of common stock.

IPO Scenarios. We assumed two IPO scenarios for 2011 and 2012, which we weighted 20% to 2011 and 50% to 2012. The 2011 IPO scenario included the same assumptions as in the 2011 IPO scenario used in the April 30, 2011 contemporaneous valuation, except that the timing of the IPO had been extended to the end of 2011. The 2012 IPO scenario also included the same assumptions as in the 2012 IPO scenario used in the April 30, 2011 contemporaneous valuation, except that the timing of the IPO had been extended to the end of 2012.

For the 2011 IPO scenario, we applied the same multiple to our projected 2011 revenue as in the prior contemporaneous valuation, which was at the first quartile of the trailing 12 months revenue multiple for the comparable companies, since we do not expect FDA clearance for *Vantera* until 2012 and the possibility of lower growth when compared to publicly traded peers. We used the same comparable public companies as were used in the prior contemporaneous valuation, except for 2 companies that were acquired prior to the valuation date. Under this 2011 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $115.0 million. We then discounted this value back to the valuation date using a discount rate of 24% and applied a marketability discount of 10%, which yielded a per share value of $9.76 for this scenario.

For the 2012 IPO scenario, we applied a multiple of projected 2012 revenue that was the median of trailing 12 months revenue multiples for the comparable companies. Under this 2012 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $142.4 million. We then discounted this value back to the valuation date using a discount rate of 24% and applied a marketability discount of 10%, which yielded a per share value of $9.57 for this scenario.

Sale Scenario. We assumed a 25% probability of a sale of the company by the end of the fourth quarter of 2012. This sale scenario assumed that the IPO window is not open or that we receive an attractive acquisition offer.

For the sale scenario, we applied a multiple to our projected 2012 revenue that was the median of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $135.0 million. We then discounted this value back to the valuation date using a discount rate of 24% and applied a marketability discount of 10%, which yielded a per share value of $9.12 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the sale scenarios and a liquidation scenario in which no value is available for distribution to the holders of common stock, we estimated the fair market value of our common stock to be $9.02 per share as of September 30, 2011. We began using this valuation for stock options granted after that date, the first of which were granted on November 18, 2011, and continuing through December 31, 2011.

We used a marketability discount of 10% for each of the exit scenarios. As with the prior valuations, we used a Black-Scholes at-the-money put option analysis, which yielded a 14% discount. We also considered the option-based approach in the Finnerty model, which provides that the discount on a privately-held security can be estimated by the value of an "average-strike" put option conveying the right to sell at an average price during the life of the option. The Finnerty model, which works under the assumption that investors do not have the unique ability to time the market, yielded an 8% discount. The selected marketability discount of 10% was in the range of the two models.

The primary factors that supported the decrease in the fair market value of our common stock from $9.84 per share at April 30, 2011 to $9.02 per share at September 30, 2011 were:

- extended timing to the date of the expected exit event, which increased the impact of the discount rate on the estimated value;
- a decrease in the overall estimated probability of an IPO, which generally results in a lower valuation of the common stock due to the conversion of preferred stock and resulting elimination of liquidation preferences, from 75% to 70%, and a corresponding increase in the overall estimated probability of a sale transaction from 20% to 25%;
- a decrease in the valuations of the publicly traded comparable companies and the corresponding decreases in their revenue multiples; and
- an overall deterioration in the capital markets during the third quarter of 2011.

Contemporaneous Valuation as of December 31, 2011

In December 2011, we completed the external clinical validation of the *Vantera* system and submitted a 510(k) premarket notification to the FDA. In addition, the stock prices of the comparable companies, as well as various market indices, recovered during the fourth quarter of 2011 from their declines experienced during the second and third quarters of 2011 resulting from uncertainty associated with general economic and political conditions in the United States and abroad. As a result, we performed a contemporaneous valuation of our common stock as of December 31, 2011 and assigned probability weights to potential future outcomes as follows:

- 45% to an IPO by the end of the second quarter of 2012;
- 40% to an IPO by the end of the fourth quarter of 2012;
- 10% to a sale of the company by the end of the fourth quarter of 2012; and
- 5% to the liquidation scenario in which no value is available for distribution to the holders of common stock.

IPO Scenarios. We assumed two IPO scenarios for 2012, which we weighted 45% to the end of the second quarter and 40% to the end of the fourth quarter of 2012. The second quarter 2012 IPO scenario included the same assumptions as in the 2011 IPO scenario used in the September 30, 2011 contemporaneous valuation, except that the timing of the IPO had been extended to the end of the second quarter of 2012. The fourth quarter 2012 IPO scenario also included the same assumptions as in the 2012 IPO scenario used in the September 30, 2011 contemporaneous valuation.

For the second quarter 2012 IPO scenario, we applied the same multiple to our actual 2011 revenue as in the prior contemporaneous valuation, which was at the first quartile of the trailing 12 months revenue multiple for the comparable companies, since we do not expect FDA clearance for *Vantera* until the end of 2012 and we considered the possibility of lower growth when compared to publicly traded peers. We used the same 14 comparable public companies as were used in the prior contemporaneous valuation. Under this second quarter 2012 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $124.6 million. We then discounted this value back to the valuation date using a discount rate of 24% and applied a marketability discount of 10%, which yielded a per share value of $9.78 for this scenario.

For the fourth quarter 2012 IPO scenario, we applied a multiple of projected 2012 revenue that was the median of trailing 12 months revenue multiples for the comparable companies. Under this 2012 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $153.8 million. We then discounted this value back to the valuation date using a discount rate of 24% and applied a marketability discount of 10%, which yielded a per share value of $10.66 for this scenario.

Sale Scenario. We assumed a 10% probability of a sale of the company by the end of the fourth quarter of 2012. This sale scenario assumed that the IPO window is not open or that we receive an attractive acquisition offer.

For the sale scenario, we applied a multiple to our projected 2012 revenue that was the median of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $131.5 million. We then discounted this value back to the valuation date using a discount rate of 24% and applied a marketability discount of 10%, which yielded a per share value of $9.20 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the sale scenarios and a liquidation scenario in which no value is available for distribution to the holders of common stock, we estimated the fair market value of our common stock to be $9.59 per share as of December 31, 2011.

We used a marketability discount of 10% for each of the exit scenarios. As with the prior valuations, we used a Black-Scholes at-the-money put option analysis, which yielded a 15% discount. We also considered the option-based approach in the Finnerty model, which provides that the discount on a privately-held security can be estimated by the value of an "average-strike" put option conveying the right to sell at an average price during the life of the option. The Finnerty model, which works under the assumption that investors do not have the unique ability to time the market, yielded an 8% discount. The selected marketability discount of 10% was in the range of the two models.

The primary factors that supported the increase in the fair market value of our common stock from $9.02 per share at September 30, 2011 to $9.59 per share at December 31, 2011 were:

- an increase in the overall estimated probability of an IPO, which generally results in a higher valuation of the common stock due to the conversion of preferred stock and resulting elimination of liquidation preferences, from 70% to 85%, and a corresponding decrease in the overall estimated probability of a sale transaction from 25% to 10%;
- an increase in the valuations of the publicly traded comparable companies and the corresponding increases in their revenue multiples; and
- an overall recovery in the capital markets during the fourth quarter of 2011.

We did not grant any stock options between November 19, 2011 and March 31, 2012.

Contemporaneous Valuation as of March 31, 2012

During the three months ended March 31, 2012, we continued preparations for an IPO. There were no specific milestone events relating to our business that caused the valuation of our common stock to change from December 2011 through March 2012. However, as the stock prices of comparable companies, as well as a number of market indices, continued to recover during the first quarter of 2012 from their declines experienced during 2011, we elected to perform a contemporaneous valuation of our common stock as of March 31, 2012 and assigned probability weights to potential future outcomes as follows:

25% to an IPO by the end of the second quarter of 2012;

60% to an IPO by the end of the fourth quarter of 2012;

10% to a sale of the company by the end of the fourth quarter of 2012; and

5% to the liquidation scenario in which no value is available for distribution to the holders of common stock.

IPO Scenarios. We assumed two IPO scenarios for 2012, which we weighted 25% to the end of the second quarter and 60% to the end of the fourth quarter of 2012. Both 2012 IPO scenarios included the same assumptions, multiples and comparable companies that were used for those scenarios in the December 31, 2011 contemporaneous valuation.

Under the updated second quarter 2012 IPO scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $140.6 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $11.74 for this scenario. Under the updated fourth quarter 2012 scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $180.8 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $13.51 for this scenario.

Sale Scenario. We assumed a 10% probability of a sale of the company by the end of the fourth quarter of 2012. This sale scenario assumed that the IPO window is not open or that we receive an attractive acquisition offer.

For the sale scenario, we applied a multiple to our projected 2012 revenue that was the first quartile of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology. We reduced the selected multiple from the median as of December 31, 2011 to the first quartile as of March 31, 2012, since we believed that the probability of receiving a valuation premium as part of any acquisition offer had declined over that period. This reduction in the selected multiple, when applied to our projected 2012 revenues, significant reduced the estimated valuation of our company using the sale scenario when compared to the prior contemporaneous valuation as of December 31. 2011. Under this revised scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $45.4 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $4.09 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the sale scenarios and a liquidation scenario in which no value is available for distribution to the holders of common stock, we estimated the fair market value of our common stock to be $11.45 per share as of March 31, 2012.

We used a marketability discount of 10% for each of the exit scenarios. Consistent with the prior valuations, we used a Black-Scholes at-the-money put option analysis, which yielded a 13% discount. We also considered the option-based approach in the Finnerty model, which provides that the discount on a privately-held security can be estimated by the value of an “average-strike” put option conveying the right to sell at an average price during the life of the option. The Finnerty model, which works under the assumption that investors do not have the unique ability to time the market, yielded an 8% discount. The selected marketability discount of 10% was in the range of the two models.

The primary factors that supported the increase in the fair market value of our common stock from $9.59 per share at December 31, 2011 to $11.45 per share at March 31, 2012 were:

- an increase in the valuations of the publicly traded comparable companies and the corresponding increases in their revenue multiples;
- an increase in the probability of an IPO during the fourth quarter of 2012 at a higher valuation based on our higher full year 2012 projected revenues, as compared to the lower probability of an IPO during the second quarter of 2012 that would yield valuations based on our trailing 2011 revenues;
- a decrease in the discount rate from 24% to 20%, as we believed our risk premium was reduced as a result of our ability to meet forecasts and our intent to raise additional capital; and
- an improvement in the capital markets during the first quarter of 2012.

In May 2012, we granted new stock options with an exercise price of $11.45 per share. Our compensation committee determined that $11.45 per share continued to be the fair market value of our common stock on the grant date, giving significant weight to the March 31, 2012 valuation.

Contemporaneous Valuation as of June 30, 2012

During the six months ended June 30, 2012, we continued preparations for an IPO and experienced strong operating results. There were no specific milestone events relating to our business that caused the valuation of our common stock to significantly change from March 2012 through June 2012. However, as the stock prices of comparable companies, as well as a number of market indices, continued to fluctuate during the second quarter of 2012 from their recovery experienced during the first quarter of 2012, we elected to perform a contemporaneous valuation of our common stock as of June 30, 2012 and assigned probability weights to potential future outcomes as follows:

- 50% to an IPO by the end of the fourth quarter of 2012;
- 35% to an IPO by the end of the second quarter of 2013;
- 10% to a sale of the company by the end of the fourth quarter of 2012; and
- 5% to the liquidation scenario in which no value is available for distribution to the holders of common stock.

IPO Scenarios. We assumed two IPO scenarios for 2012 and 2013, which we weighted 50% to the end of the fourth quarter of 2012 and 35% to the end of the second quarter of 2013. The 2012 IPO scenario included the same assumptions, multiples and comparable companies as set forth in the March 31, 2012 contemporaneous valuation for the end of second quarter of 2012 IPO scenario. The 2013 IPO scenario included the same assumptions, multiples and comparable companies as set forth in the March 31, 2012 contemporaneous valuation for the end of fourth quarter of 2012 IPO scenario.

Under the fourth quarter 2012 IPO scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $138.8 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $11.05 for this scenario. Under the second quarter 2013 IPO scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $206.0 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $14.62 for this scenario.

Sale Scenario. We assumed a 10% probability of a sale of the company by the end of the fourth quarter of 2012. This sale scenario assumed that the IPO window is not open or that we receive an attractive acquisition offer.

For the sale scenario, we applied a multiple to our projected 2012 revenue that was the first quartile of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology, which was the same selected multiple as had been used as part of the March 31, 2012 contemporaneous valuation. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $50.6 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $4.73 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the sale scenarios and a liquidation scenario in which no value is available for distribution to the holders of common stock, we estimated the fair market value of our common stock to be $11.12 per share as of June 30, 2012.

We used a marketability discount of 10% for each of the exit scenarios. Consistent with the prior valuations, we used a Black-Scholes at-the-money put option analysis, which yielded a 14% discount. We also considered the option-based approach in the Finnerty model, which provides that the discount on a privately-held security can be estimated by the value of an "average-strike" put option conveying the right to sell at an average price during the life of the option. The Finnerty model, which works under the assumption that investors do not have the unique ability to time the market, yielded an 8% discount. The selected marketability discount of 10% was in the range of the two models.

The primary factors that supported the decrease in the fair market value of our common stock from $11.45 per share at March 31, 2012 to $11.12 per share at June 30, 2012 were:

- an increase in the probability of an IPO during the fourth quarter of 2012 at a lower valuation based on our full year 2012 projected revenues, as compared to the lower probability of an IPO during the second quarter of 2013 that would yield a higher valuation based on our trailing 2013 revenues; and
- a modest decrease in the valuations of the publicly traded comparable companies and the corresponding decreases in their revenue multiples.

On June 21, 2012, the compensation committee of our board of directors approved the grant of options to purchase an aggregate of 73,138 shares of our common stock with an exercise price equal to the greater of $11.45 or the per-share value of our common stock as of June 30, 2012. These options were granted on August 2, 2012 with an exercise price of $11.45 per share, after we completed the June 30 valuation of our common stock, and we began to recognize stock-based compensation expense with respect to these options in the third quarter of 2012.

On August 7, 2012, we granted new stock options to purchase an aggregate of 29,100 shares of our common stock with an exercise price of $11.12 per share. Our compensation committee determined that $11.12 per share continued to be the fair market value of our common stock on the grant date, giving significant weight to the June 30, 2012 valuation.

Contemporaneous Valuation as of September 30, 2012

During the nine months ended September 30, 2012, we continued preparations for an IPO and experienced strong operating results. In August 2012, we received FDA clearance to market our *Vantera* system. We intend to decentralize access to our technology through the *Vantera* system in order to drive both geographic expansion and the adoption of our *NMR LipoProfile* tests. As a result, we performed a contemporaneous valuation of our common stock as of September 30, 2012 and assigned probability weights to potential future outcomes as follows:

- 15% to an IPO by the end of the fourth quarter of 2012;
- 70% to an IPO by the end of the second quarter of 2013;

10% to a sale of our company by the end of the fourth quarter of 2012; and

5% to the liquidation scenario in which no value is available for distribution to the holders of common stock.

IPO Scenarios. We assumed two IPO scenarios for 2012 and 2013, which we weighted 15% to the end of the fourth quarter of 2012 and 70% to the end of the second quarter of 2013. The 2012 IPO scenario included the same assumptions, multiples and comparable companies as set forth in the June 30, 2012 contemporaneous valuation for the 2012 IPO scenario. The 2013 IPO scenario included the same assumptions, multiples and comparable companies as set forth in the June 30, 2012 contemporaneous valuation for the 2013 IPO scenario.

Under the fourth quarter 2012 IPO scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $149.9 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $12.46 for this scenario. Under the second quarter 2013 IPO scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends, was estimated to be $198.9 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $14.83 for this scenario.

Sale Scenario. We assumed a 10% probability of a sale of our company by the end of the fourth quarter of 2012. This sale scenario assumed that the IPO window is not open or that we receive an attractive acquisition offer.

For the sale scenario, we applied a multiple to our projected 2012 revenue that was the first quartile of trailing 12 months revenue multiples among the target companies evaluated using the guideline transactions methodology. Under this scenario, the value available for distribution to common stockholders, after payment of preferred stock dividends and liquidation preferences, was estimated to be $57.5 million. We then discounted this value back to the valuation date using a discount rate of 20% and applied a marketability discount of 10%, which yielded a per share value of $5.59 for this scenario.

Weighted-Average Valuation. Based on the relative weights of the two IPO scenarios, the sale scenario and a liquidation scenario in which no value is available for distribution to the holders of common stock, we estimated the fair market value of our common stock to be $12.81 per share as of September 30, 2012.

Consistent with the prior valuations, we used a marketability discount of 10% for each of the exit scenarios. We used a Black-Scholes at-the-money put option analysis, which yielded a 12% discount. We also considered the option-based approach in the Finnerty model, which provides that the discount on a privately-held security can be estimated by the value of an “average-strike” put option conveying the right to sell at an average price during the life of the option. The Finnerty model, which works under the assumption that investors do not have the unique ability to time the market, yielded a 7% discount. The selected marketability discount of 10% was in the range of the two models.

The primary factors that supported the increase in the fair market value of our common stock from $11.12 per share at June 30, 2012 to $12.81 per share at September 30, 2012 were:

closer proximity to the date of the expected exit events, which decreased the impact of the discount rate on the estimated value;

an increase in the valuation for the IPO scenario during the fourth quarter of 2012 resulting from slightly higher multiples for the comparable public companies as a result of increases in their market valuations; and

an increase in the weighting of the higher-value IPO scenario during the second quarter of 2013 from 35% to 70%, with a corresponding reduction in the lower-value IPO scenario during the fourth quarter of 2012 from 50% to 15%.

On November 28, 2012, we granted new stock options to purchase an aggregate of 62,177 shares of our common stock with an exercise price of $12.81 per share. Our compensation committee determined that $12.81 per share continued to be the fair market value of our common stock on the grant date, giving significant weight to the September 30, 2012 valuation.

On December 5, 2012, we granted new stock options to purchase an aggregate of 21,340 shares of our common stock with an exercise price of $12.81 per share. Our compensation committee determined that $12.81 per share continued to be the fair market value of our common stock on the grant date, giving significant weight to the September 30, 2012 valuation.

Aggregate Intrinsic Value of Equity Awards

Based upon an assumed public offering price of $14.00 per share, the midpoint of the range reflected on the cover page of this prospectus, the aggregate intrinsic value of outstanding vested stock options as of September 30, 2012 was $19.8 million.

Redeemable Convertible Preferred Stock Warrants

In connection with prior financing transactions, we have issued freestanding warrants to purchase shares of our redeemable convertible preferred stock. These warrants are classified as liabilities on our balance sheets at their fair value, because the warrants may conditionally obligate us to redeem the underlying convertible preferred stock at some point in the future. We adjust the warrants to their current fair value at each balance sheet date, and we recognize any resulting change in fair value as a component of other income (expense) in the statements of operations.

We have estimated the fair value of the warrants at each balance sheet date using a Black-Scholes option pricing model. We use a number of assumptions to estimate the fair value of the warrants, including the fair value of the preferred stock issuable upon exercise of the warrants, the remaining contractual terms of the warrants, risk-free interest rates, expected dividend yield and expected volatility of the price of the common stock into which the preferred stock is convertible.

The fair value of the preferred stock issuable upon exercise of the warrants was determined in accordance with the same methodologies described above under “Stock-Based Compensation Expense−Determination of the Fair Value of Common Stock on Grant Dates,” and taking into account the relative dividend and liquidation preference rights of the various series of preferred stock. Using the option-pricing method described above, as of October 31, 2008, of the estimated enterprise value of $71.7 million, approximately $19.6 million was allocated to the Series F redeemable convertible preferred stock, or $6.56 per outstanding share, and approximately $21.1 million was allocated to the Series E redeemable convertible preferred stock, or $4.78 per outstanding share. Similarly, as of September 30, 2009, of the estimated enterprise value of $114.0 million, approximately $26.3 million was allocated to the Series F redeemable convertible preferred stock, or $8.80 per outstanding share, and approximately $30.0 million was allocated to the Series E redeemable convertible preferred stock, or $6.81 per outstanding share.

Beginning with our contemporaneous valuation as of December 31, 2009, as described above we began using the PWER method to allocate the weighted enterprise value between the common stock and the preferred stock. Using the same probability weightings as described above for the various exit scenarios, at December 31, 2009, approximately $17.9 million was allocated to the Series F redeemable convertible preferred stock, or $5.98 per outstanding share, and approximately $21.7 million was allocated to the Series E redeemable convertible preferred stock, or $4.92 per outstanding share. As of June 30, 2010, approximately $17.9 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $6.00 per outstanding share, and approximately $21.7 million was allocated to the Series E redeemable convertible preferred stock, or $4.70 per outstanding share. Similarly, as of November 30, 2010, approximately $20.5 million of weighted

enterprise value was allocated to the Series F redeemable convertible preferred stock, or $6.87 per outstanding share, and approximately $25.0 million was allocated to the Series E redeemable convertible preferred stock, or $5.42 per outstanding share. As of December 31, 2010, approximately $20.9 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $7.00 per outstanding share, and approximately $25.5 million was allocated to the Series E redeemable convertible preferred stock, or $5.52 per outstanding share.

As of April 30, 2011, approximately $23.8 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $7.97 per outstanding share, and approximately $28.7 million was allocated to the Series E redeemable convertible preferred stock, or $6.22 per outstanding share. As of September 30, 2011, approximately $22.4 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $7.49 per outstanding share, and approximately $27.0 million was allocated to the Series E redeemable convertible preferred stock, or $5.85 per outstanding share. As of December 31, 2011, approximately $21.4 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $7.16 per outstanding share, and approximately $26.8 million was allocated to the Series E redeemable convertible preferred stock, or $5.69 per outstanding share.

As of March 31, 2012, approximately $24.8 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $8.29 per outstanding share, and approximately $31.8 million was allocated to the Series E redeemable convertible preferred stock, or $6.74 per outstanding share.

As of June 30, 2012, approximately $24.3 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $8.13 per outstanding share, and approximately $31.1 million was allocated to the Series E redeemable convertible preferred stock, or $6.59 per outstanding share.

As of September 30, 2012, approximately $27.0 million of weighted enterprise value was allocated to the Series F redeemable convertible preferred stock, or $9.04 per outstanding share, and approximately $35.3 million was allocated to the Series E redeemable convertible preferred stock, or $7.49 per outstanding share.

Upon the closing of this offering and the conversion of the underlying preferred stock to common stock, the preferred stock warrants will automatically become warrants to purchase shares of our common stock. The then-current aggregate fair value of these warrants will be reclassified from liabilities to additional paid-in capital, and we will cease to record any related periodic fair value adjustments.

Income Taxes

We are subject to income taxes in the United States, and we use estimates in determining our provision for income taxes. We use the asset and liability method of accounting for income taxes. Under this method, deferred tax asset or liability account balances are calculated at the balance sheet date using current tax laws and rates in effect for the year in which the differences are expected to affect taxable income.

Recognition of deferred tax assets is appropriate when realization of such assets is more likely than not. We recognize a valuation allowance against our net deferred tax assets if it is more likely than not that some portion of the deferred tax assets will not be fully realizable. This assessment requires judgment as to the likelihood and amounts of future taxable income by tax jurisdiction. At December 31, 2011, we had a full valuation allowance against all of our deferred tax assets.

Effective January 1, 2007, we adopted the new authoritative guidance to account for uncertain tax positions. None of our currently unrecognized tax benefits would affect our effective income tax rate if recognized, due to the valuation allowance that currently offsets our deferred tax assets. We do not anticipate the total amount of unrecognized income tax benefits relating to tax positions existing at December 31, 2011 will significantly increase or decrease in the next 12 months.

We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position' s sustainability and is measured at the largest amount of benefit that is greater than 50% likely to be realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether:

the factors underlying the sustainability assertion have changed; and

the amount of the recognized tax benefit is still appropriate.

The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

As of December 31, 2011, we had federal net operating loss carryforwards, state net operating loss carryforwards and research and development credit carryforwards of $34.0 million, $31.1 million, and $2.0 million, respectively. The federal and state net operating loss carryforwards begin to expire in 2012 and 2014, respectively, and the research and development credit carryforwards begin to expire in 2012. We analyzed our filing positions in all significant federal, state and foreign jurisdictions where we are required to file income tax returns, as well as open tax years in these jurisdictions. With few exceptions, we are no longer subject to U.S. Federal and state and local tax examinations by tax authorities for years prior to 2008, although carryforward attributes that were generated prior to 2008 may still be adjusted upon examination by the Internal Revenue Service if they either have been or will be used in a future period.

Variations in Quarterly Results

Our quarterly results may vary significantly as a result of many factors, many of which are outside our control. For example, we expect that the volume of our *NMR LipoProfile* tests ordered will generally decline during the holiday periods, when patients are less likely to visit their healthcare providers. As a result, comparison of our results of operations for successive quarters may not accurately reflect trends or results for the full year. Our historical results should not be considered a reliable indicator of our future results of operations.

Contractual Commitments and Obligations

We have contractual obligations for non-cancelable office space and office equipment operating leases, as well as our credit facility with Square 1. The following table discloses aggregate information about material contractual obligations and periods in which payments are due as of December 31, 2011. Future events could cause actual payments to differ from these estimates.

	Payment due by period				
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
			(in thousands)		
Principal repayments on Square 1 term loan	$6,000	$ 2,400	$3,600	$–	$ –
Interest payments on Square 1 term loan (1)	571	361	210	–	–
Operating lease obligations	13,012	616	3,566	3,521	5,309
Purchase obligations	4,598	4,598	–	–	–
Total	$24,181	$ 7,975	$7,376	$3,521	$ 5,309

(1) Assumes that the variable rate is 7.25% and that there is no prepayment of principal balance during the term of the loan.

In December 2012, we repaid in full all outstanding amounts owed to Square 1 and entered into a new credit facility with Square 1 and Oxford. Our obligations under the new credit facility are not reflected in the foregoing table. The new credit facility provides for $16.0 million in term loans with a maturity date of July 2016 and a revolving line of credit of up to $6.0 million with a maturity date of December 2013.

Off-Balance Sheet Arrangements

As of September 30, 2012, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

Recent Accounting Pronouncements

In January 2010, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2010-06, Fair Value Measurements and Disclosures (Topic 820): Improving Disclosures about Fair Value Measurements, or Update No. 2010-06. Update No. 2010-06 requires new disclosures for fair value measures and provides clarification for existing disclosure requirements. Specifically, this amendment requires an entity to disclose separately the amounts of significant transfers in and out of Level I and Level II fair value measurements and to describe the reasons for the transfers; and to disclose separately information about purchases, sales, issuances and settlements in the reconciliation for fair value measurements using significant unobservable inputs, or Level III inputs. This amendment clarifies existing disclosure requirements for the level of disaggregation used for classes of assets and liabilities measured at fair value and requires disclosure about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements using Level II and Level III inputs. This guidance is effective for interim and annual reporting periods beginning after December 15, 2009, except for certain Level III activity disclosure requirements that will be effective for reporting periods beginning after December 15, 2010. We adopted this amendment on January 1, 2010. Other than requiring additional disclosures, the adoption of this new guidance did not have a material impact on our financial statements.

In February 2010, the FASB issued ASU No. 2010-09, *Subsequent Events* (Topic 855): *Amendments to Certain Recognition and Disclosure Requirements*, or Update No. 2010-09. Update No. 2010-09 provides clarification regarding the date through which subsequent events are evaluated. The modification to the subsequent events guidance removes the requirement to disclose the date through which subsequent events were evaluated in both originally issued and reissued financial statements for SEC filers. We adopted this amendment on February 24, 2010. The adoption of this new guidance did not have a material impact on our financial statements.

In January 2011, the FASB issued ASU No. 2011-01, *Receivables* (Topic 310): *Deferral of the Effective Date of Disclosures about Troubled Debt Restructurings*, or Update No. 2010-20. Update No. 2010-20 temporarily delays the effective date of the disclosures about troubled debt restructurings in ASU No. 2010-20, *Receivables* (Topic 310): *Disclosures about the Credit Quality of Financing Receivables and the Allowance for Credit Losses*, for public entities. The delay is intended to allow the FASB time to complete its deliberations on what constitutes a troubled debt restructuring. The effective date of the new disclosures about troubled debt restructurings for public entities and the guidance for determining what constitutes a troubled debt restructuring will then be coordinated. This deferral has no material impact on our financial statements.

In January 2011, the FASB issued ASU No. 2011-02- *Receivables* (Topic 310): *A Creditor's Determination of Whether a Restructuring Is a Troubled Debt Restructuring*. The amendments in this update provide additional guidance to assist creditors in determining whether a restructuring of a receivable meets the criteria to be considered a troubled debt restructuring. For public companies, the new guidance is effective for interim and annual periods beginning on or after June 15, 2011, and applies retrospectively to restructurings occurring on or after the beginning of the fiscal year of adoption. Early application is permitted. We adopted this amendment as of January 1, 2011. The adoption of this new guidance did not have a material impact on our financial statements.

In July 2011, the FASB issued ASU No. 2011-07, *Health Care Entities* (Topic 954): *Presentation and Disclosure of Patient Service Revenue, Provisions for Bad Debts, and the Allowance for Doubtful Accounts for Certain Health Care Entities*. The amendments in this update require that certain health care entities change the presentation of their statement of operations by reclassifying the provision for bad debts associated with patient service revenue from an operating expense to a deduction from patient service revenue, net of contractual

allowances and discounts. In addition, the amendments also require enhanced disclosure about policies for recognizing revenue and assessing bad debts and disclosures of qualitative and quantitative information about changes in the allowance for doubtful accounts. For public companies, the new guidance is effective for interim and annual periods beginning after December 15, 2011. Early application is permitted. We adopted this amendment as of January 1, 2012. The adoption of this new guidance did not have a material impact on our financial statements.

In May 2011, the FASB issued ASU No. 2011-04, *Fair Value Measurement and Disclosures* (Topic 820): *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and International Financial Reporting Standards*. The amendments in this update amends current guidance to achieve a consistent definition of fair value and ensure that the fair value measurement and disclosure requirements are similar between U.S. GAAP and International Financial Reporting Standards, or IFRS. Consequently, the amendments change certain fair value measurement principles and enhance the disclosure requirements particularly for Level 3 fair value measurements. The amendments in this update are effective, on a prospective basis, for reporting periods beginning on or after December 15, 2011, with early adoption permitted. We adopted this amendment as of January 1, 2012. The adoption of this new guidance required expanded disclosure only and did not have an impact on our financial position, results of operations or cash flows.

Under the JOBS Act, emerging growth companies that become public can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards following the completion of this offering and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Quantitative and Qualitative Disclosures about Market Risk

Market risk is the risk of loss to future earnings, to fair values or to future cash flows that may result from changes in price of a financial instrument. The value of a financial instrument may change as a result of changes in interest rates, exchange rates, commodity prices, equity prices and other market changes.

Interest Rate Sensitivity

We are exposed to market risk related to changes in interest rates as it impacts our interest income and expense.

Cash and Cash Equivalents. As of September 30, 2012, we had cash and cash equivalents of $10.3 million. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. Our cash equivalents are invested in interest-bearing certificates of deposit and money market funds. We do not enter into investments for trading or speculative purposes. Due to the conservative nature of our investment portfolio, which is predicated on capital preservation and mainly consists of investments with short maturities, we do not believe an immediate one percentage point change in interest rates would have a material effect on the fair market value of our portfolio, and therefore we do not expect our operating results or cash flows to be significantly affected by changes in market interest rates.

Term Loan and Line of Credit. As of September 30, 2012, we had debt obligations of $7.7 million under our previous credit facility with Square 1. Our primary exposure to market risk is interest expense sensitivity, which is affected by changes in the general level of U.S. interest rates. Our debt obligation under the previous credit facility bore a variable interest rate equal to the greater of 7.25% or Square 1' s prime rate plus 3.75%. If there is a rise in interest rates, our debt service obligations under the loan agreement would increase even though the amount borrowed remained the same, which would affect our results of operations, financial condition and liquidity. Assuming no changes in our variable rate debt obligations from the amount outstanding at September 30, 2012, a hypothetical one percentage point change in underlying variable rates would have changed our annual interest expense and cash flow from operations by approximately $68,000 without taking into account the effect of any hedging instruments. We have not entered into, and do not expect to enter into, hedging arrangements.

Foreign Currency Exchange Risk

We bill our customers and payors in U.S. dollars and receive payment in U.S. dollars. Accordingly, our results of operations and cash flows are not subject to fluctuations due to changes in foreign currency exchange rates. If we grow sales of our *NMR LipoProfile* test outside of the United States, or place the *Vantera* system in foreign jurisdictions, our contracts with foreign customers and payors may be denominated in foreign currency and may become subject to changes in currency exchange rates.

BUSINESS

Overview

We are an *in vitro* diagnostic company pioneering a new field of personalized diagnostics based on nuclear magnetic resonance, or NMR, technology. Our first diagnostic test, the *NMR LipoProfile* test, directly measures LDL-P in a blood sample and provides physicians and their patients with actionable information to personalize management of risk for heart disease. To date, over 8 million *NMR LipoProfile* tests have been ordered. Our automated clinical analyzer, the *Vantera* system, has recently been cleared by the FDA. The *Vantera* system requires no previous knowledge of NMR technology to operate and has been designed to significantly simplify complex technology through ease of use and walk-away automation. The *Vantera* system became commercially available in December 2012. We plan to selectively place the *Vantera* system on-site with national and regional clinical laboratories as well as leading medical centers and hospital outreach laboratories. We are driving toward becoming a clinical standard of care by decentralizing our technology and expanding our menu of personalized diagnostic tests to address a broad range of cardiovascular, metabolic and other diseases.

Approximately 50% of people who suffer a heart attack have normal cholesterol levels. We believe that direct quantification of the number of LDL and other lipoprotein particles using our NMR-based technology platform addresses the deficiencies of traditional cholesterol testing and allows clinicians to more effectively manage their patients' risk of developing cardiovascular disease. We believe that the inherent analytical and clinical advantages of NMR-based technology, which can simultaneously analyze lipoproteins as well as hundreds of small molecule metabolites from blood serum, plasma and several other bodily fluids without time-consuming sample preparation, will also allow us to expand our diagnostic test menu. The scientific community is actively investigating our NMR-based technology for use in the prediction of diabetes, insulin resistance and other metabolic disorders, and we believe that our technology provides an attractive platform for potential expansion of the diagnostic tests we plan to offer into these areas.

Our strategy is to continue to advance patient care by converting clinicians, and the clinical diagnostic laboratories they use, from traditional cholesterol testing to our *NMR LipoProfile* test for the management of patients at risk for cardiovascular disease, with the goal of ultimately becoming a clinical standard of care. An increasing number of large clinical outcome studies, including MESA and the Framingham Offspring Study, indicate that a patient's number of LDL particles is more strongly associated with the risk of developing cardiovascular disease than is his or her level of LDL-C when one of the measures suggests a higher risk and the other suggests a lower risk. LDL-C is a measure of the amount of cholesterol contained in LDL particles and is used to estimate the patient's LDL level. LDL-P and LDL-C, both of which are alternative measures of LDL and its associated cardiovascular risk, are used clinically in the same manner to determine whether a patient has elevated LDL, potentially requiring treatment, and to monitor LDL-lowering treatment response over time. In the MESA and Framingham studies, which we believe clinically validate the performance of our test, participants' LDL-P levels were measured using our *NMR LipoProfile* test, while their LDL-C levels were measured using a traditional cholesterol test.

Because the *NMR LipoProfile* test provides direct quantification of the number of LDL particles, as well as additional measurements related to a patient's risk for developing cardiovascular disease, we believe that it has the potential to become a new paradigm by which clinicians evaluate key cardiovascular risk factors to provide better treatment recommendations and improve outcomes, even for patients considered to have normal levels of cholesterol. A 2008 joint consensus statement by the ADA and the ACC recognized that direct LDL particle measurement by NMR may be a more accurate way to capture the risk posed by LDL than is traditional LDL-C measurement. Additionally, in October 2011, the National Lipid Association, or NLA, convened an expert panel to evaluate the use of a number of biomarkers other than LDL-C, including LDL particle number, for initial clinical risk assessment of cardiovascular disease and ongoing management of cardiovascular disease risk in patients. The recommendations of this panel included:

> for initial clinical risk assessment, the use of LDL particle number, as well as a number of the other non-LDL-C biomarkers, is reasonable for many patients considered to be at intermediate risk of

coronary heart disease, patients with a family history of coronary heart disease and patients with recurrent cardiac events, and it should be considered for selected patients known to have coronary heart disease; and

for ongoing management of risk, the use of LDL particle number, as well as some of the other biomarkers, is reasonable for many patients at intermediate risk, patients with known coronary heart disease and patients with recurrent cardiac events, and it should be considered for selected patients with a family history of coronary heart disease.

To date, the *NMR LipoProfile* test has been ordered over 8 million times, including more than 1.5 million times during 2011. The number of *NMR LipoProfile* tests ordered increased at a compound annual growth rate of approximately 30% from 2006 to 2011. We generated revenues of $45.8 million for the year ended December 31, 2011 and $41.2 million for the nine months ended September 30, 2012. Our *NMR LipoProfile* test has its own dedicated CPT code and is reimbursed by a number of governmental and private payors, which we believe collectively represent approximately 150 million covered lives. These payors include Medicare, TRICARE, WellPoint, United Healthcare and several Blue Cross Blue Shield affiliates.

We estimate that more than 75 million traditional cholesterol tests, or lipid panels, are performed by independent clinical laboratories and hospital outreach laboratories for patient management purposes each year in the United States. Accordingly, we estimate that the 1.5 million *NMR LipoProfile* tests we performed in the year ended December 31, 2011 represented 2% of our potential market. In a number of states where we have targeted our sales and marketing efforts, we estimate that we have achieved market penetration rates of up to 11%. For example, in North Carolina, Alabama and West Virginia, we estimate that the number of *NMR LipoProfile* tests performed represented approximately 11%, 7% and 7%, respectively, of the total cholesterol tests performed in those states for patient management purposes, and 6% in Georgia. We plan to significantly increase our geographic presence across the United States to expand market awareness and penetration of the *NMR LipoProfile* test, with the goal of ultimately becoming a clinical standard of care.

Our CLIA-certified clinical laboratory allows us to fulfill current demand for our test and we believe serves as a strategic asset that will facilitate our ability to launch new personalized diagnostic tests we plan to develop. To accelerate clinician and clinical diagnostic laboratory adoption of the *NMR LipoProfile* test and future clinical diagnostic tests, we plan to decentralize access to our technology platform through the launch of our new *Vantera* system, a highly automated next-generation version of our NMR-based clinical analyzer technology platform that is designed to be placed directly in clinical diagnostic laboratories. In August 2012, we received FDA clearance to market our *Vantera* system. We currently expect to begin placing the *Vantera* system in third-party clinical diagnostic laboratory facilities in the first quarter of 2013, which we believe will facilitate their ability to offer our *NMR LipoProfile* test and other diagnostic tests that we may develop.

We have entered into agreements with some of our current clinical diagnostic laboratory customers to place the *Vantera* system in their laboratories. We are also in discussions with additional laboratory customers who have indicated a similar interest in the placement of the *Vantera* system. We currently expect these placements to begin in the first quarter of 2013. We will retain full ownership of any *Vantera* analyzers placed in third-party laboratories and will be responsible for support and maintenance obligations. In general, we expect that the number of *Vantera* analyzers that will be placed in our clinical diagnostic laboratory customers' facilities will depend on their demonstrated annual production volume for the *NMR LipoProfile* test and their ability to increase demand for our tests.

Market Overview

Coronary Heart Disease

Cardiovascular disease is the leading cause of death in the industrialized world. The American Heart Association, or AHA, estimates that in 2006 approximately 81 million people in the United States had one or more forms of cardiovascular disease and that it claimed approximately 831,000 lives in the United States that year, with the number of cardiovascular deaths increasing with age. As of 2011, the AHA estimated that cardiovascular disease was responsible for 17% of national health expenditures in the United States. The AHA projects that, by 2030, 40.5% of the

U.S. population will have some form of cardiovascular disease and that, between 2010 and 2030, the U.S. total direct medical costs of cardiovascular disease, expressed in 2008 dollars, will triple from $273 billion to $818 billion.

CHD is the second most prevalent form of cardiovascular disease after hypertension and results from the failure of the heart to supply oxygenated blood to the body. According to the AHA, CHD accounted for over one-half of all cardiovascular disease deaths in 2006, and the U.S. total direct medical costs of CHD are projected to triple from $36 billion in 2010 to $106 billion in 2030.

CHD usually results from atherosclerosis, a hardening and narrowing of the arteries caused by a buildup of fatty plaque composed of cholesterol and other lipids, such as triglycerides, in the arterial wall. Heart attacks may result from reduced blood flow to the heart caused by progressive plaque buildup or by blood clots produced by plaque rupture.

Lipoproteins and Atherosclerosis

Lipoprotein particles are the "containers" that transport cholesterol, triglycerides and other lipids throughout the bloodstream. Lipoprotein particles span a range of sizes and densities and are grouped into three primary classes:

LDL, or low density lipoproteins, are intermediate-sized particles and carry cholesterol from the liver to the rest of the body;

HDL, or high density lipoproteins, are the smallest particles and collect cholesterol from the body' s tissues, bringing it back to the liver; and

VLDL, or very low density lipoproteins, are the largest particles and are rich in triglycerides.

Within each of these primary classes, there are several subclasses based on the size of the particles. For example, there are large, medium and small particles within each of the LDL, HDL and VLDL classes.

Atherosclerosis occurs when elevated numbers of LDL particles enter the arterial wall, become oxidized and are taken up by macrophages, a type of immune cell, and transformed into fatty plaque deposits. HDL particles, on the other hand, protect against atherosclerosis by, among other mechanisms, preventing oxidation of LDL particles and facilitating cholesterol removal from plaque. LDL particles are therefore considered to be "bad" because elevated levels of these particles in the blood promote atherosclerosis, and HDL particles are considered to be "good" because high levels in the blood help to prevent atherosclerosis.

Since the 1960s, the scientific community has recognized that LDL particles are a key causal factor for atherosclerosis. However, for many years the only practical way to estimate the amount of LDL and HDL was to measure the level of cholesterol contained in these particles. Chemical measures of cholesterol concentration in lipoprotein particles, such as those reported by the lipid panel, have become the most commonly used clinical measurement not because they were shown to be better than alternative lipoprotein measurements for predicting cardiovascular outcomes, but because historically they were the simplest and easiest to perform in routine clinical laboratories. As a result, the terms "bad cholesterol" and "good cholesterol" have become synonymous with LDL and HDL in the minds of both patients and clinicians. With the medical community' s initial focus on cholesterol, rather than on the lipoprotein particles carrying that cholesterol, the widely prescribed class of LDL-lowering drugs known as statins are perceived as cholesterol-lowering drugs, when in fact they function by lowering the number of LDL particles in the blood.

Clinical Uses and Market for Cholesterol Testing

The medical community seeks to more effectively manage patients' risk for developing CHD and atherosclerosis because of the serious health effects, mortality and high treatment cost associated with these conditions. Current clinical practice guidelines issued by the National Cholesterol Education Program, or NCEP, an influential authority on cholesterol management overseen by the National Heart, Lung, and Blood Institute, or NHLBI, part of the National Institutes of Health, recommend that the intensity of LDL-lowering therapy should be based on a person' s risk for CHD. Accordingly, accurate measurement of a patient' s CHD risk is critical to managing his or her ongoing treatment.

Due in large part to NCEP recommendations, cholesterol testing to help assess CHD risk and to manage LDL, and sometimes HDL, levels has become well-established in clinical practice. Drug companies have also contributed significantly to the awareness of the importance of cholesterol testing through physician education and direct-to-consumer advertising of LDL-lowering drugs, including statins. Cholesterol awareness programs, the aging of patient populations and the ongoing need to perform cholesterol tests for patient monitoring and management have all led to considerable growth in the cholesterol testing market.

Clinicians have historically assessed a patient' s CHD risk and ongoing response to statins and other lipid-altering therapies by prescribing traditional cholesterol tests. These tests are a part of the conventional lipid panel, which has four components:

LDL-C, or the amount of cholesterol contained in LDL particles;

HDL-C, or the amount of cholesterol contained in HDL particles;

total cholesterol; and

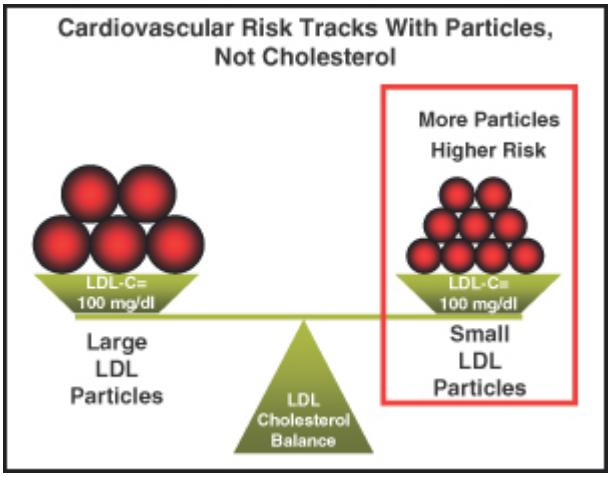
triglycerides.

Lipid panels are among the most frequently ordered laboratory tests in the United States. According to Medicare billing data, the lipid panel was the fourth most frequently ordered test in clinical laboratories in 2009. We estimate that over 75 million lipid panel tests are performed annually by clinical diagnostic laboratories and hospital outreach laboratories for patient management.

Limitations of Traditional Cholesterol Testing

While LDL and HDL testing is a generally well-accepted means to determine a patient' s need for LDL-lowering or HDL-raising therapy and monitoring treatment response, there is increasing awareness that the traditional cholesterol measures of these key lipoprotein risk factors are deficient because they can overestimate or underestimate the actual levels of these lipoproteins in many patients and the CHD risk they confer. Many patients have disparities between their level of cholesterol and the number of lipoprotein particles in their blood, a state known as discordance. We believe that discordance leads directly to the under-treatment or over-treatment of millions of patients.

The cholesterol content of individual LDL and HDL particles can vary more than two-fold between patients and can change over time in the same patient. If the amounts of cholesterol per particle did not vary, LDL-C would always be an accurate measure of LDL. In practice, however, one person may have larger, more cholesterol-rich LDL particles, while a second person may have smaller, less cholesterol-rich LDL particles. As illustrated by the graphic below, a person with smaller LDL particles at a given level of LDL-C will always have more LDL particles, and consequently higher CHD risk, than a person with the same LDL-C carried in larger LDL particles.



Research data have shown that LDL-P is more strongly correlated with CHD risk in discordant patients than is the level of LDL-C. In one large population study, over 30% of patients with "optimal," or low, LDL-C had higher, less-than-optimal LDL-P levels. We believe these discordant patients may be at higher risk for developing CHD but would not be identified by traditional cholesterol testing as potentially needing LDL-lowering treatment. Such a patient' s medical provider would be able to prescribe pharmaceutical therapies, such as statins, niacin or fibrates, as well as dietary and other lifestyle changes to benefit that patient. Conversely, discordant patients with low LDL-P but higher LDL-C might be expected to derive little clinical benefit from LDL-lowering treatments. Despite the increasing body of clinical evidence indicating the benefits of particle number measurement over cholesterol measurement, technological limitations and lack of clinician awareness have prevented LDL-P and HDL-P from becoming more well-accepted within the medical community.

The diagnostic limitations of traditional cholesterol testing were cited in the 2008 joint consensus statement of the ADA and ACC, which concluded that LDL-C may not accurately represent the quantity of atherosclerosis-causing LDL particles, especially in those patients with the typical lipid abnormalities of cardiometabolic risk, such as elevated triglycerides and low HDL-C. The consensus statement suggested that a more accurate way to capture the risk posed by LDL may be to measure LDL-P directly using NMR technology. The consensus statement recognized the need for more independent data confirming the accuracy of direct LDL particle measurement using NMR and whether its predictive power with respect to heart disease is consistent across various ethnicities, ages, and conditions that affect lipid metabolism. We believe that the subsequent publication of large clinical outcome studies, such as MESA, has helped to address these concerns and to confirm the accuracy and usefulness of our NMR-based technology.

Our Solution

Our *NMR LipoProfile* test has been cleared by the FDA for use in our clinical laboratory and directly measures LDL-P for use in managing cardiovascular risk. We believe that our test provides clinicians with more clinically relevant information about LDL and other classes and subclasses of lipoproteins than does the traditional cholesterol test for managing their patients' CHD risk.

The current *NMR LipoProfile* test report consists of two pages. The first page includes test results for the following measurements:

- LDL-P, along with reference ranges to guide patient management decisions;
- HDL-C; and
- triglycerides.

We have requested and received clearance from the FDA to provide the test results from our *NMR LipoProfile* test for each of these measurements, regardless of whether the test is performed using our standard clinical analyzer or using the *Vantera* system.

The second page of the *NMR LipoProfile* report includes test results for a number of additional lipoprotein measures that have been validated by us but which have not been cleared by the FDA. These include:

- measures related to cardiovascular risk, including HDL-P, the total number of small LDL particles, and LDL particle size; and
- measures associated with insulin resistance and diabetes risk, including numbers of large HDL particles, small LDL particles and large VLDL particles, as well as HDL, LDL and VLDL particle size.

The second page includes a legend to the effect that these additional measurements, while validated by LipoScience, have not been cleared by the FDA and that the clinical utility of these measurements has not been fully established. When the *Vantera* system is placed in third-party laboratories, they will process the blood sample and produce the FDA-cleared results on the first page of the test report. At the option of the third-party laboratories, we will still make the second-page test results available to them at no additional charge for dissemination along with the first-page results. We will generate these second-page results in our clinical laboratory using either NMR spectrum data digitally sent to us by the third-party laboratory or a portion of the original blood sample that they send to us. We will then send the second-page results back to the third-party laboratories, which will report these results to their customers along with the first-page results.

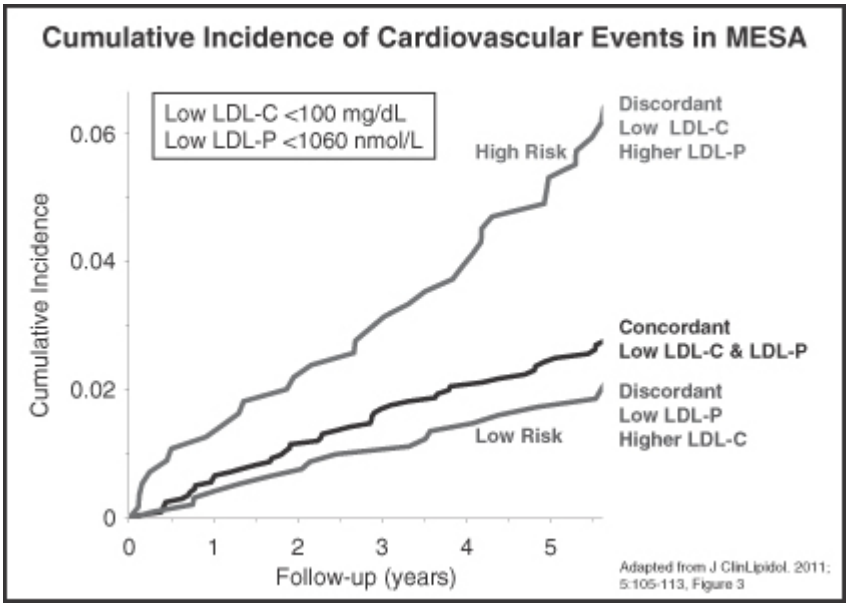
Clinical Validation of Lipoprotein Particle Quantification Using NMR

Our test was developed initially to provide a novel and efficient way to quantify, or count, the numbers of lipoprotein particles of different sizes in blood plasma or serum. Subsequently, clinical outcome studies were performed to compare the cardiovascular disease associations of our particle test results with those of traditional cholesterol tests. On the basis of the findings of those studies, we believe that our test provides clinicians with more clinically relevant information about LDL and other classes and subclasses of lipoproteins to aid in the management of the CHD risk of their patients.

The clinical utility of lipoprotein particle quantification has been supported by a number of scientific papers published in peer-reviewed journals, including *Journal of the American Medical Association*, *New England Journal of Medicine*, *Circulation*, *American Journal of Cardiology*, *Atherosclerosis* and *Journal of Clinical Lipidology*. To date, eleven cardiovascular disease outcome studies have specifically evaluated the link between LDL-P and CHD risk. In each case, LDL-P was associated significantly with atherosclerotic outcomes and, in ten of those studies, the strength of association was greater than for LDL-C. In each of the ten studies, the same blood samples were analyzed by traditional cholesterol testing and by our *NMR LipoProfile* test to enable a comparison of LDL-C and LDL-P in terms of their correlation with atherosclerosis and CHD risk.

We believe the following three studies are of particular note in showing the greater clinical relevance of LDL and HDL particle count as compared to LDL and HDL cholesterol measurement. Dr. James Otvos, our founder and Chief Scientific Officer, was an author of each of these published studies. Dr. Otvos collaborated with the studies' academic investigators to formulate the study hypotheses and data analysis plan, and he assisted with data interpretation and publication of the study results. We did not provide any funding for any of these studies. We performed all NMR lipoprotein testing in a fully blinded fashion, with us having no knowledge of the identity or clinical status of the participants who provided the blood samples being tested. In addition, Dr. Otvos' s affiliation with us was disclosed in each publication. In each case, the person responsible for the scientific validity and integrity of the study was someone other than Dr. Otvos, and none of the investigators were affiliated with our company.

Multi-Ethnic Study of Atherosclerosis (MESA). In this observational study of frozen archived baseline blood samples from almost 5,600 ethnically diverse individuals conducted by the NHLBI, with a mean follow-up period of over five years, LDL-P was found to be more predictive of future cardiovascular events, such as heart attack, chest pain, stroke or death from CHD, among individuals with discordant LDL-P and LDL-C levels. Furthermore, the MESA data also indicated that individuals with "optimal," or low, levels of LDL-C, but discordantly higher LDL-P, had significantly greater risk of cardiovascular events. In contrast, other patients with higher levels of LDL-C, but low LDL-P, did not have greater risk. The figure below illustrates these results.



Framingham Offspring Study. In this long-running community-based observational study of over 3,000 men and women conducted by the NHLBI, blood samples from the same subjects at baseline were tested for both LDL-C by conventional cholesterol testing and for LDL-P by our *NMR LipoProfile* test. Data from this study indicated that LDL-P levels were more strongly associated with future cardiovascular events occurring during a median follow-up period of nearly 15 years than were either LDL-C or non-HDL cholesterol, defined as total cholesterol minus HDL cholesterol. Discrepancies between LDL-P and LDL-C were particularly prevalent at low LDL concentrations. When there was discordance between LDL-P and LDL-C levels above or below the median, cardiovascular disease risk was found to track more closely with LDL-P than LDL-C.

Veterans Affairs HDL Intervention Trial (VA-HIT). This trial, in which over 2,500 men with existing CHD and low levels of HDL-C and LDL-C were treated for five years with gemfibrozil, a fibric acid derivative, demonstrated that reductions in new CHD events could be achieved by this HDL-raising drug. *NMR LipoProfile* analysis conducted in a subset of over 1,000 men from this trial showed that HDL-P was increased more than HDL-C by gemfibrozil, and that levels of HDL-P and LDL-P during the trial predicted future CHD events, whereas levels of HDL-C and LDL-C did not.

Benefits of Our Test

We believe the *NMR LipoProfile* test provides the following benefits to clinicians and their patients, clinical diagnostic laboratories and healthcare payors:

Benefits to Clinicians and Patients

Improved patient management. We believe that the *NMR LipoProfile* test provides a more accurate picture of a patient' s lipoprotein-related CHD risk and the patient' s ongoing response to LDL-lowering and HDL-raising therapies than does LDL-C and HDL-C, as measured by traditional cholesterol tests. By providing clinicians with better information about the key lipoprotein risk factors, LDL and HDL, clinicians can design a personalized therapeutic and lifestyle management plan tailored to address the principal drivers of their patients' CHD risk.

Strong clinical validation. Clinical research and numerous CHD outcome studies support the stronger predictive capacity of LDL-P for CHD patient management, compared to LDL-C.

Reimbursement. The *NMR LipoProfile* test has a dedicated Category I CPT code. The American Medical Association assigns Category I CPT codes to procedures that are consistent with contemporary medical practice, are widely performed and meet other specified criteria. The *NMR LipoProfile* test is reimbursed by Medicare and other governmental payors, as well as by many private insurance carriers.

Improved accessibility. We have commercial relationships with a number of national and regional clinical diagnostic laboratories, including Laboratory Corporation of America, or LabCorp. These arrangements allow clinicians to more easily order the *NMR LipoProfile* test through their laboratory providers instead of having to order it directly from us.

Ease of Use. The *NMR LipoProfile* test requires only a standard blood draw and, unlike traditional cholesterol tests, does not require the patient to fast in order to measure LDL-P and HDL-P.

Benefits to Laboratories

Driver of revenue and margin growth. Clinicians are increasingly recognizing the growing importance of LDL-P in measuring CHD risk, which we believe is evidenced by the 30% compound annual growth in the number of *NMR LipoProfile* tests ordered from 2006 to 2011. Offering the *NMR LipoProfile* test allows laboratories to meet the medical community' s growing demand for the test and expand their product offerings. Given the higher reimbursement rate our test enjoys as compared to traditional cholesterol testing, the *NMR LipoProfile* test also presents laboratories with an opportunity to increase their revenues and expand their margins.

Simplicity, efficiency and cost-effectiveness. Our use of NMR does not require time-consuming physical sample separation procedures.

Ability to leverage our sales and marketing efforts. Our *NMR LipoProfile* test is typically ordered by clinicians through clinical diagnostic laboratories. Our laboratory customers benefit from our direct sales force and our marketing programs and materials, which increase demand for our *NMR LipoProfile* test.

Future integration into existing laboratory operations. We intend to selectively place the *Vantera* system on-site at our clinical diagnostic laboratory customers' locations. The *Vantera* system is designed to easily integrate into existing laboratory information systems and workflows, requiring limited technician attention and simple process management.

Scalable platform. Using our NMR technology platform, multiple diagnostic tests can be performed simultaneously from a single sample.

Benefits to Payors

More effective management of a costly disease. The *NMR LipoProfile* test is designed to help clinicians more effectively manage CHD risk, both in patients whose risk of CHD would have been underestimated by traditional cholesterol testing and in those patients who are being overtreated because traditional testing overstates their risk. Because our test provides information that allows physicians to make more informed therapeutic decisions, we believe it can lessen the financial burden of CHD on the payor community.

Low relative cost. The price for our test, while higher than that of a traditional cholesterol test, is still relatively low compared to other advanced cardiovascular panels. Medicare generally reimburses our test at a rate of $43.36 per test.

Our Strategy

Our strategy is to continue to advance patient care by converting clinicians, and the clinical diagnostic laboratories they use, from traditional cholesterol testing to our *NMR LipoProfile* test for the management of patients at risk for CHD, with the goal of ultimately becoming a clinical standard of care. The key elements of our strategy to achieve this goal include:

Expand our sales force nationally. We currently have sales representatives in 21 states who target clinicians, as well as dedicated representatives targeting clinical diagnostic laboratories and third-party payors. We intend to expand our investment in our sales force in order to penetrate all major markets in the United States and potentially in selected markets outside of the United States.

Increase market awareness and educate clinicians about the clinical benefits of our test. To create awareness, encourage clinician evaluation and increase orders for our *NMR LipoProfile* test, we provide our sales force with peer-reviewed clinical outcome studies, medical society guidelines and other clinical evidence sources. Our direct sales force uses these sources in calls on high-prescribing cardiologists, primary care physicians, allied healthcare professionals and laboratory administrators. We plan to continue to increase our investment in medical education and marketing efforts to promote our test as the standard of care for the management of cardiovascular risk.

Expand relationships with clinical diagnostic laboratories. Approximately 88% of the revenues derived from our *NMR LipoProfile* tests for the nine months ended September 30, 2012 were attributable to tests ordered through clinical diagnostic laboratories. We plan to expand our business with these existing laboratory customers and to develop relationships with additional national and regional laboratories. We intend to train laboratory customers' sales forces and partner with them to gain access to additional clinicians and educate them about the benefits of our test. Where appropriate, we intend to collaborate with our laboratory customers to encourage health plan administrators to support reimbursement for the test.

Decentralize access to our technology platform with the Vantera system. We intend to selectively place our *Vantera* system, recently cleared by the FDA, on-site with large clinical diagnostic laboratories, leading medical centers and hospital outreach laboratories. We intend to develop an expanded menu of

additional personalized diagnostic tests that use our NMR-based technology, which we believe will increase the appeal of the *Vantera* system to laboratories. We expect that the availability of the *Vantera* system, if it receives the appropriate international regulatory approvals, would also facilitate our ability to expand internationally if we decide to do so.

Broaden medical policy coverage. We have a dedicated team of managed care specialists who pursue the expansion of coverage for our test with third-party payors. Our clinical diagnostic laboratory customers, prescribing physicians and healthcare thought leaders also assist us in influencing payors to cover our test. We intend to further broaden coverage by leveraging the increasing weight of clinical data, expanding access to our test and increasing utilization to incentivize payors to cover our test and set adequate reimbursement levels.

Pursue inclusion in treatment guidelines. We actively engage key opinion leaders and medical societies in an effort to have the *NMR LipoProfile* test included as a standard of care in clinical guidelines. The potential benefits of testing for LDL-P have been discussed in the ADA/ACC consensus statement, in a position statement published by a working group of the American Association of Clinical Chemistry and, most recently, in recommendations by the panel of clinical lipidology experts convened by the NLA. We plan to pursue inclusion of our *NMR LipoProfile* test in other clinical guidelines, including those of the NCEP and the American Heart Association.

Develop and expand relationships with leading academic medical centers. We have collaborated with leading academic medical centers, including the Mayo Foundation, the Cleveland Clinic and Oxford University, on clinical validation studies and research for developing new applications using NMR technology. We intend to pursue additional collaborations to further validate our technology, investigate potential new diagnostic tests and provide clinical data for publications and regulatory submissions.

Develop new personalized diagnostic tests using our NMR-based technology platform. Our *NMR LipoProfile* test exploits only a very small fraction of the available information contained within an NMR spectrum of a sample. We intend to exploit the inherent analytical advantages of NMR spectroscopy, including its ability to analyze bodily fluids other than blood serum and plasma, to expand our menu of available diagnostic tests. We are currently developing additional NMR-based diagnostic tests to predict a patient' s risk for type 2 diabetes, and evaluating NMR technology for the detection and management of several different cancers as well as inflammatory, gastrointestinal and neurological diseases.

Our Technology Platform

Our technology platform combines proprietary signal processing algorithms and NMR spectroscopic detection into a clinical analyzer to identify and quantify concentrations of lipoproteins and, potentially, small molecule metabolites. NMR detectors, or spectrometers, analyze a blood plasma or serum sample by subjecting it to a short pulse of radio frequency energy within a strong magnetic field. Each lipoprotein particle within a given diameter range simultaneously emits a distinctive radio frequency signal, similar to distinctive ringing sounds for bells of different sizes. The amplitude, or "volume," of the NMR signal is directly proportional to the concentration of the particular subclass of lipoprotein particles emitting the signal. Our proprietary software then collects, records and analyzes the composite signals emitted by all of the particles in the sample in real time and separates the signals into distinct subclasses. Within minutes, we are able to quantify multiple subclasses of lipoprotein particles.

Our technology platform based on NMR offers the following advantages over conventional methods of quantifying lipoproteins and small molecule metabolites:

Information-rich detection. NMR can analyze lipoproteins as well as potentially hundreds of small molecule metabolites.

Processing efficiency. Our technology does not require physical separation of the lipoprotein particles and does not require chemical reagents in order to evaluate a sample.

Sample indifference. Our technology may be used to analyze multiple sample types, including plasma, serum, urine, cerebrospinal fluid and other biological fluids.

Throughput. Simultaneous lipoprotein and metabolite quantification from a rapid NMR measurement makes the platform extremely efficient with high throughput.

The *Vantera* System

The *Vantera* system is our next-generation automated clinical analyzer. In August 2012, we received FDA clearance to market the *Vantera* system commercially to laboratories. We intend to decentralize access to our technology through the *Vantera* system in order to drive both geographic expansion and the technology adoption necessary for successful execution of our market conversion strategy. We intend to place the *Vantera* system in select high-volume national and regional clinical diagnostic laboratories, as well as at leading medical centers and hospital outreach laboratories. We have entered into agreements with some of our current clinical diagnostic laboratory customers to place the *Vantera* system in their laboratories. We are also in discussions with additional laboratory customers who have indicated a similar interest in the placement of the *Vantera* system. We currently expect these placements to begin in the first quarter of 2013.

As with our existing clinical analyzers, the *Vantera* system uses NMR spectroscopy and proprietary signal processing algorithms to identify and quantify lipoproteins and metabolites from a single spectrum, or scan. We believe that the *Vantera* system provides the following strategic and technological benefits:

direct access to our technology on site, rather than relying on a "send-out" test;

processing of samples at a rate that is approximately twice as fast as our current-generation analyzers;

a reagent-less platform requiring no sample preparation for analysis;

multiple NMR-test processing capabilities; and

limited operator intervention, with no specialized NMR training required for operation.

We believe the selective placement of our *Vantera* system directly in laboratories throughout the United States will further drive our market conversion strategy by decentralizing access to our technology. We expect that strong commercial relationships with clinical diagnostic laboratories will allow us to leverage the sales forces of these laboratories for additional access to prescribing clinicians, as well as third-party payors with whom the laboratories have existing contracts.

Sales, Marketing and Distribution

We currently market our *NMR LipoProfile* test through a direct sales force in 21 states. Our sales strategy involves the use of a combination of sales managers, sales representatives and medical science liaisons who target primary care physicians, cardiologists and key medical opinion leaders, as well as separate dedicated personnel targeting clinical diagnostic laboratories and third-party payors. As of December 31, 2012, we had 74 employees engaged in sales and marketing functions, including our sales managers and sales representatives, medical science liaisons, personnel focused on our sales efforts to clinical diagnostic laboratories and managed care specialists focused on third-party payors. We expect to increase our sales force as we seek to drive conversion of the market to our *NMR LipoProfile* test and expand into other parts of the United States.

The role of our sales force is to promote the *NMR LipoProfile* test and educate clinicians, laboratories and payors about its medical benefits over traditional cholesterol tests, as well as the potential economic benefits of providing patients with personalized cardiovascular risk management. Our sales and marketing activities are supported by the publication and presentation of relevant peer-reviewed medical studies and articles, educational programs, meetings and trade shows, print advertising in medical-related periodicals and customer support and service programs.

We intend to continue to distribute the *NMR LipoProfile* test directly through national and regional clinical diagnostic laboratories. During the nine months ended September 30, 2012, we generated approximately 88% of our revenues from our *NMR LipoProfile* tests through these laboratories.

Under our current agreement with LabCorp, which went into effect as of September 2012, LabCorp will make the *NMR LipoProfile* test available nationally to its clients. We also provide LabCorp with our sales materials, as well as access to the various medical education and other marketing programs that we sponsor and conduct, for their use in connection with the promotion of the *NMR LipoProfile* test.

Under our agreement with LabCorp, we will continue to fulfill all orders received from LabCorp for the *NMR LipoProfile* test and perform those tests at our own laboratory facilities, but we will also place *Vantera* analyzers directly in LabCorp laboratories, with the number of analyzers based on the annual volume of *NMR LipoProfile* tests performed in a particular facility. There is no minimum number of tests that LabCorp is required to order from us under the agreement. We will be providing service and support of the *Vantera* analyzers placed at LabCorp facilities.

Our agreement with LabCorp has a term that continues until September 2015 and is automatically renewable for additional two-year terms, unless either party provides 90 days written notice of its intent not to renew the agreement at the end of the initial term or any subsequent two-year term. Either we or LabCorp may terminate the agreement upon the occurrence of a breach of the agreement by the other party that is not cured within a specified number of days after notice thereof by the non-breaching party, or if the other party files for bankruptcy protection or enters into similar proceedings. LabCorp may also terminate the agreement upon 90 days written notice in specified circumstances.

Coverage and Reimbursement

Clinicians order the *NMR LipoProfile* test directly from us and indirectly through clinical diagnostic laboratories located throughout the United States. When we sell our *NMR LipoProfile* test to a laboratory customer, we receive a fixed fee per test at a level individually negotiated with each laboratory, and the laboratory takes responsibility for billing and collections from third parties, including Medicare and other governmental and commercial payors. Under our agreement with LabCorp, in the event that LabCorp is unable under applicable law or an existing agreement to bill and collect for the testing services from third parties, then LabCorp is not obligated to pay us the applicable fee, in which case we may bill the third parties directly for our tests performed. To date, this situation has not occurred, and we have billed LabCorp for all tests performed under our agreement with them.

When a clinician orders the test directly from us, we have the responsibility for securing reimbursement. Our managed care team seeks to establish coverage for our test with all payors, including Medicare, state Medicaid agencies and commercial insurance carriers, so that we and our laboratory customers can maximize reimbursement.

Laboratory tests, as with most other healthcare services, are classified for reimbursement purposes according to their respective CPT codes. In 2006, the American Medical Association' s CPT Editorial Board issued a Category I CPT code (83704) for our *NMR LipoProfile* test. With its own dedicated CPT code, our *NMR LipoProfile* test is reimbursed by a number of governmental and private payors, which we believe collectively represent approximately 150 million covered lives. These payors include Medicare, TRICARE, WellPoint, United Healthcare and several Blue Cross Blue Shield affiliates.

Medicare and Medicaid

CMS, which establishes reimbursement payment levels and coverage rules for Medicare, currently covers our *NMR LipoProfile* test. All *NMR LipoProfile* tests that are performed for Medicare patients and directly billed to Medicare are subject to Medicare' s national coverage regulation. This applies to both our direct business as

well as that of our laboratory customers. In order to obtain Medicare reimbursement under this policy, we and our laboratory customers are required to comply with all Medicare regulations. We believe that we have sufficient processes and procedures in place to comply with Medicare requirements and to directly seek reimbursement from Medicare for our *NMR LipoProfile* test.

Individual state agencies establish reimbursement levels for Medicaid. Our *NMR LipoProfile* test is currently reimbursed by several of these state Medicaid agencies, although it is not a significant portion of our business.

Commercial Insurance Carriers and Managed Care Organizations

In-network. Our laboratory customers have participating provider, or in-network, agreements with payors that we believe cover a majority of insured individuals in the United States and, as a result, our *NMR LipoProfile* test is frequently billed to an insurer as an in-network benefit. In-network agreements specify a fixed price for reimbursement over a fixed period of time. These in-network agreements between insurers and our laboratory customers allow for better and more consistent reimbursement to them, while we receive a fixed fee per test without assuming the risk of non-payment from an insurance company. We also have an in-network agreement with Blue Cross Blue Shield of North Carolina that covers *NMR LipoProfile* tests ordered directly from us.

Out-of-network. For our direct business that is not performed through a laboratory customer and not covered under our in-network agreement with Blue Cross Blue Shield of North Carolina, we are generally an out-of-network provider, meaning that we do not have a contractual agreement in place that specifies a fixed price for reimbursement. Instead, we bill these payors on a fee-for-service basis and then invoice the patient for the remainder of what the insurer does not pay, up to our total billed amount.

Competitive Products and Technologies

We compete primarily against the conventional lipid panel test as well as alternative methods of measuring cholesterol concentrations or lipoproteins.

The lipid panel test is widely ordered by physician offices and performed in substantially all clinical diagnostic laboratories. It is relatively inexpensive and reimbursed by virtually all payors. However, the market for lipid panel tests is highly fragmented, and there is no dominant provider for these tests.

We also compete against companies that offer other methods for measuring lipoproteins. Unlike our technology, however, these methods require lipoproteins to first be physically separated on the basis of differences in size or density or composition before being measured. These physical separation methods generally involve relatively labor-intensive steps to separate the sample and are more time-consuming and more costly to perform than the *NMR LipoProfile* test. Among the companies providing these tests are Berkeley HeartLab, Inc., now part of Quest Diagnostics, as well as Atherotech, Inc. and SpectraCell Laboratories.

There are also diagnostic tests available that measure other lipoprotein indicators of cardiovascular disease risk, including apolipoprotein B, or apoB, a protein found on both LDL and VLDL particles. Plasma apoB levels provide a measure of the aggregate number of LDL plus VLDL particles. While an apoB test is generally less expensive than our *NMR LipoProfile* test, it does not offer the breadth of information useful in the management of CHD risk provided by our test, including:

- measures related to cardiovascular risk, including HDL-P, the total number of small LDL particles, and LDL particle size; and
- measures associated with insulin resistance and diabetes risk, including numbers of large HDL particles, small LDL particles and large VLDL particles, as well as HDL, LDL and VLDL particle size.

The apoB test is a non-proprietary test offered by many clinical diagnostic laboratories. We believe that the lack of universal standardization of the apoB test has limited its use by physicians.

In order for us to successfully compete against these alternative tests and technologies, we will need to demonstrate that our products deliver superior results and value as a result of our key differentiators, including FDA clearance, clinical validation, improved patient outcomes, accessibility, ease of use, speed and efficiency, scalability and economic benefits.

Research and Development

With the recent FDA clearance of our *Vantera* system, our research and development efforts are focused on implementing improvements and enhancements to the *Vantera* system as well as on developing new personalized diagnostic tests using our NMR-based technology.

Each NMR analysis returns data that could be used to measure concentrations of hundreds of small molecule metabolites, and we believe that our technology is suited for the measurement of any number of those metabolites with minimal sample preparation in a rapid, easy-to-use and efficient manner. Our technology also supports the analysis of other bodily fluids in addition to plasma, such as urine and cerebrospinal fluid.

We are actively developing our test for use in assessing insulin resistance and risk for developing type 2 diabetes. We currently provide an insulin resistance score as a laboratory-developed test that is part of the *NMR LipoProfile* test. This test, which is not cleared or approved by the FDA at this time, uses a lipoprotein-based indicator to assess insulin resistance status, an early indicator of type 2 diabetes. We are developing enhancements to this assay to improve its utility and we intend to discuss the regulatory submission process with the FDA for this enhanced diagnostic test in 2013.

We are also investigating opportunities to develop a number of additional diagnostic tests, including:

Additional lipoprotein tests. These would utilize lipoprotein subclass and particle size information to address diagnosis or management of additional cardiovascular or metabolic disease states.

Single-analyte tests. These would measure metabolites from a variety of sample types, such as plasma, urine, cerebrospinal fluid and other biological fluids.

Multivariate-indexed tests. These would simultaneously measure multiple metabolites in order to evaluate risk for developing or to diagnose certain diseases.

Research is under way to further explore the use of NMR technology for the detection and management of certain cancers, gastrointestinal, inflammatory and neurologic diseases.

In August 2011, we also entered into a patent license agreement with Cleveland Clinic that will allow us to develop a diagnostic test using our NMR technology for cardiovascular disease risk based on a metabolite known as trimethylamine N-oxide, or TMAO, derived from an individual' s intestinal microbes. A research team at Cleveland Clinic has discovered a link between this metabolite and cardiovascular disease risk, and we believe this discovery may lead to new diagnostic tests and therapeutic approaches to the treatment of heart disease.

As of December 31, 2012, we had 46 employees engaged in research and development functions. Our research and development expenses were $6.2 million, $7.3 million and $7.8 million for the years ended December 31, 2009, 2010 and 2011, respectively, and $7.4 million for the nine months ended September 30, 2012.

Testing and Laboratory Operations

We currently process all samples and perform all *NMR LipoProfile* tests at our laboratory, which occupies approximately 39,000 square feet at our headquarters in Raleigh, North Carolina. Our laboratory allows us to fulfill current demand for our test and serves as a strategic asset that we believe will facilitate our ability to launch new personalized diagnostic tests we plan to develop. Our laboratory is certified under the Clinical Laboratory Improvement Amendments, or CLIA, and is accredited by the College of American Pathology. We also satisfy the additional licensing requirements of a number of states, including New York.

Our *NMR LipoProfile* test begins with a standard blood sample taken at the direction of a clinician. The plasma from the blood sample is sent to our laboratory either directly by the referring clinician or by a clinical diagnostic laboratory. Our *NMR LipoProfile* test requires minimal preparation and the results are produced within minutes. We typically report results to clinicians or the referring laboratory within 24 hours of our receipt of a sample.

We operate 17 of our current generation NMR analyzers and two of our *Vantera* system analyzers to perform our tests. We currently operate our laboratory six and one-half days per week, with multiple shifts each day, and we believe we can expand our production capacity to approximately 45,000 tests per week on our current testing infrastructure.

We will continue to operate our laboratory facility, even after the placement of our *Vantera* system analyzers at our laboratory customers' facilities, as an early launch platform for new NMR-based personalized diagnostic tests.

We source the components of the *Vantera* system, including the magnet and console, sample handler and shell, from Agilent Technologies and KMC Systems, Inc., original equipment manufacturers who will ship the components to us or at our direction directly to the laboratory or research center for assembly. As part of the assembly, we will install our proprietary signal processing software and diagnostic tests to complete the placement of the *Vantera* system.

Supply Agreements

Agilent Technologies

In July 2012, we entered into a supply agreement with Agilent Technologies pursuant to which we agreed to exclusively purchase from Agilent the magnet, console and probe used in the *Vantera* system. Under the supply agreement, subject to specified exceptions, Agilent agreed not to sell the NMR probes, components and controlling electronics and acquisition software to customers in the United States who intend to use such technology within a designated restricted field of use or in connection with designated specimen types. Agilent retains all rights to sell such NMR technology to other customers for uses, applications and purposes outside of the specified field of use, including research use, investigative use and other specified *in vitro* diagnostic applications. We are responsible for all regulatory filings and required approvals related to the commercial availability of the *Vantera* system.

Under the supply agreement, we agreed not to sell a product using NMR technology to customers in the United States for research use, and agreed not to develop *in vitro* diagnostic products using NMR technology outside a designated field of use. We are also obligated to purchase all of our requirements for the components to be supplied by Agilent under the supply agreement.

The initial term of the supply agreement continues until July 2022. The initial term may be renewed for additional five-year periods upon mutual agreement, unless either party provides one year written notice of its intent not to renew the agreement at the end of the initial term or any subsequent five-year term. Either we or Agilent may terminate the supply agreement upon the occurrence of a breach of a material term of the agreement by the other party that is not cured within a specified number of days after notice thereof by the non-breaching party, or if the other party files for bankruptcy protection or enters into similar proceedings. Agilent may terminate the supply agreement in the event that it discontinues the sale of all NMR flow cell probes, NMR components and NMR controlling electronics and acquisition software, and, in such event, Agilent is required to provide us with not less than two years' prior written notice of such termination.

KMC Systems

In 2007, we began collaborating with KMC Systems, Inc. on the design and manufacture of the *Vantera* hardware assembly, including the frame, the autosampler and the electronic interface. In 2009, we entered into a

production agreement with KMC under which we have designated KMC as the exclusive manufacturer of the *Vantera* commercial production unit, subject to specified exceptions, and have agreed to purchase all of our *Vantera* units from KMC. The sales price for each *Vantera* unit is determined on an individual purchase order basis and is based on a pricing formula set forth in the production agreement.

The initial term of the production agreement continues until the later of three years from the first shipment of a *Vantera* analyzer or delivery of the 30th unit. The initial term will be automatically extended for additional one-year periods unless we or KMC provide the other with written notice of termination not less than 90 days prior the end of the term or an extension term. Either we or KMC may terminate the production agreement upon the occurrence of a material breach by the other party that is not cured within a specified number of days after notice thereof by the non-breaching party, if the other party files for bankruptcy protection or enters into similar proceedings, or upon a change of control of the other party, as defined in the agreement. KMC also has the right to terminate the production agreement if its production activities under a purchase order are interrupted or delayed due to our request or our failure to perform our obligations under the agreement, in each case for a 90-day continuous period. During the term of the agreement and for a specified period of time thereafter, neither we nor KMC may solicit for employment any employees of the other party.

Intellectual Property

In order to remain competitive, we must develop and maintain protection on the key aspects of our technology. We currently rely on a combination of patents, copyrights and trademarks and confidentiality, licenses and invention assignment agreements to protect our intellectual property rights. We also rely upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position. As described below, the patent covering the measurement of lipoprotein classes and subclasses by NMR, which we license from a third party, expired in August 2011. This technology is now in the public domain. However, we believe that the know-how required to directly quantify lipoprotein particles using NMR-based technology will provide sufficient barriers to entry that will not materially impact our competitive position.

Patents

We own or co-own, with one of our licensors, seven issued U.S. patents and 10 pending U.S. patent applications, one of which has a pending counterpart PCT application and three others of which have pending or issued counterpart foreign patents.

License from North Carolina State University

We license from North Carolina State University, or NCSU, on an exclusive basis, U.S. patent number 6,518,069, which expires in 2020. This patent, which we co-own, covers NMR measurements of lipoprotein subclasses for use in identifying patients at risk for type 2 diabetes and measurement of glucose levels.

Under the agreement, we paid an initial license fee of $25,000. We are required to pay NCSU a low single-digit royalty based on net sales of the licensed products and licensed tests, subject to a minimum annual royalty of $2,500. Dr. James Otvos, our founder and Chief Scientific Officer, is an adjunct professor of biochemistry at NCSU.

Under the license agreement, we are obligated to diligently pursue the development and commercialization of the licensed technologies, including manufacturing or producing a product for testing, development and sale and seeking required government approvals of the product. NCSU may terminate our license if we fail to perform our obligations under the license agreement, or if we engage in fraud, willful misconduct or illegal conduct. Unless earlier terminated, our license agreement with NCSU will terminate upon the expiration of the last-to-expire of the patents that are subjects of the license agreement.

License Agreement with Cleveland Clinic

In August 2011, we entered into a license agreement with The Cleveland Clinic Foundation, under which we have received an exclusive license to one pending U.S. and one pending European patent application and know-how in order to develop and commercialize a diagnostic test for cardiovascular disease risk based on TMAO. Under the agreement, we are responsible for designing, developing, validating and registering any such test. Upon successfully developing a TMAO assay, we would work with the appropriate regulatory agencies to prepare for its commercialization. We are also responsible for all commercial aspects of the diagnostic test, including marketing, medical education and laboratory training. In addition, while our license is on an exclusive basis, the inventions claimed by the U.S. patent application were made pursuant to government-funded research and, consequently, are subject to statutory rights retained by the U.S. government.

We paid an initial license fee of $50,000 upon signing of the agreement and are obligated to pay annual minimum amounts of between $50,000 and $75,000 beginning in 2013. Additionally, beginning in 2014, we will be obligated to pay annual minimum amounts of between $25,000 and $50,000 for international rights. These annual payments continue for the term of the agreement, which lasts until the expiration of the last licensed patent that is the subject of the agreement. In addition, we are obligated to make payments to Cleveland Clinic of up to $100,000 in the aggregate upon the achievement of specified milestones set forth in the agreement, and any such milestone payments would be credited toward our annual minimum payment obligations for the period in which the milestone payment is made. We are also obligated to pay Cleveland Clinic a high-single digit royalty based on any net sales of a diagnostic test incorporating the licensed intellectual property.

For the first five years of the agreement, we and Cleveland Clinic have the option to convert the license from exclusive to co-exclusive with one other licensee, which would have the effect of reducing the minimum annual payment obligation and reducing the royalty rate to mid-single digits.

To date, no payments have been made under this agreement other than the initial license fee and reimbursed patent expenses of approximately $35,000.

Copyrights, Trademarks and Trade Secrets

We protect the software that we use to analyze the data from our NMR spectroscopic analysis through registered copyrights in the United States, common law copyrights and as trade secrets. We hold registered trademarks in the United States for our marks "LipoProfile," "LipoScience," "LipoTube," "NMR LipoProfile," and "Vantera". We have pending U.S. trademark applications for the marks "The Particle Test," "Valet," "NMRDX" and "Vantera-Chek".

We require all employees and technical consultants working for us to execute confidentiality agreements, which provide that all confidential information received by them during the course of the employment, consulting or business relationship shall be kept confidential, except in specified circumstances. Our agreements with our employees provide that all inventions, discoveries and other types of intellectual property, whether or not patentable or copyrightable, conceived by the individual while he or she is employed by us are assigned to us. We cannot provide any assurance, however, that employees and consultants will abide by the confidentiality or assignment terms of these agreements. Despite measures taken to protect our intellectual property, unauthorized parties might copy aspects of our technology or obtain and use information that we regard as proprietary.

Government Regulation

Federal Food, Drug, and Cosmetic Act

In the United States, *in vitro* diagnostics are regulated by the FDA as medical devices under the Federal Food, Drug, and Cosmetic Act, or FDCA. We have previously received FDA clearance for our current NMR spectrometer together with the *NMR LipoProfile* test and specific portions of the report produced by the test for use in our clinical laboratory, and in August 2012, we received FDA clearance for the *Vantera* system. In the third quarter of 2011, we made a submission to the FDA seeking clearance of one additional test measurement,

HDL-P, generated by the *NMR LipoProfile* test performed on our current NMR-based clinical analyzer platform. In March 2012, we voluntarily withdrew that submission and have since worked with the FDA outside of the formal review process to resolve issues with our submission that were identified by the FDA. We resubmitted the 510(k) premarket notification to the FDA, seeking clearance of the HDL-P test, in December 2012. We have not yet sought FDA clearance of certain other portions of the report produced by our test, which may be considered to be laboratory-developed tests, or LDTs, as described below, but we plan to do so in 2013. We also plan to seek FDA clearance or approval for other diagnostic products currently under development. There are two regulatory pathways to receive authorization to market *in vitro* diagnostics: a 510(k) premarket notification and a premarket approval application, or PMA. The FDA makes a risk-based determination as to the pathway for which a particular *in vitro* diagnostic is eligible.

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 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 postmarket surveillance. Class III devices are subject to most of these requirements, as well as to premarket approval. Most Class I devices are exempt from premarket submissions to the FDA; most Class II devices require the submission of a 510(k) premarket notification to the FDA; and Class III devices require submission of a PMA. Most *in vitro* diagnostic kits are regulated as Class I or II devices and are either exempt from premarket notification or require a 510(k) submission.

510(k) premarket notification. A 510(k) notification requires the sponsor to demonstrate that a medical device is substantially equivalent to another marketed device, termed a "predicate device," that is legally marketed in the United States and for which a PMA was not required. 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. Under current FDA policy, if a predicate device does not exist, the FDA may make a risk-based determination based on the complexity and clinical utility of the device that the device is eligible for *de novo* 510(k) review instead of a requiring a PMA. The *de novo* 510(k) review process is similar to clearance of the 510(k) premarket notification, despite the lack of a suitable predicate device.

The FDA' s performance goal review time for a 510(k) notification is 90 days from the date of receipt, however, in practice, the review often takes longer. In addition, the FDA may require information regarding clinical data in order to make a decision regarding the claims of substantial equivalence. Clinical studies of *in vitro* diagnostic products are typically designed with the primary objective of obtaining analytical or clinical performance data. If the FDA believes that the device is not substantially equivalent to a predicate device, it will issue a "Not Substantially Equivalent" letter and designate the device as a Class III device, which will require the submission and approval of a PMA before the new device may be marketed. Under certain circumstances, the sponsor may petition the FDA to make a risk-based determination of the new device and reclassify the new device as a Class I or Class II device. Any modifications made to a device, its labeling or its intended use after clearance may require a new 510(k) notification to be submitted and cleared by FDA. Some modifications may only require documentation to be kept by the manufacturer, but the manufacturer' s determination of the absence of need for a new 510(k) notification remains subject to subsequent FDA disagreement and enforcement to cease marketing of the modified device.

The FDA has undertaken a systematic review of the 510(k) clearance process that includes both internal and independent recommendations for reform of the 510(k) system. The internal review, issued in August 2010, included a recommendation for development of a guidance document defining a subset of moderate risk (Class II) devices, called Class IIb, for which clinical or manufacturing data typically would be necessary to support a substantial equivalence determination. In the event that such new Class IIb sub-classification is adopted, we

believe that most of the tests that we may pursue would be classified as Class IIb devices. In July 2011, the Institute of Medicine, or IOM, issued its independent recommendations for 510(k) reform. As the FDA receives public comment on the IOM recommendations and reconciles its plan of action to respond to both the internal and IOM recommendations, the availability of the 510(k) pathway for our diagnostic tests, and the timing and data burden required to obtain 510(k) clearance, could be adversely impacted. We cannot predict the impact of the 510(k) reform efforts on the development and clearance of our future diagnostic tests.

Premarket approval. The PMA process is more complex, costly and time consuming than the 510(k) process. A PMA must be supported by more detailed and comprehensive scientific evidence, including clinical data, to demonstrate the safety and efficacy of the medical device for its intended purpose. If the device is determined to present a "significant risk," the sponsor may not begin a clinical trial until it submits an investigational device exemption, or IDE, to the FDA and obtains approval from the FDA to begin the trial.

After the PMA is submitted, the FDA has 45 days to make a threshold determination that the PMA is sufficiently complete to permit a substantive review. If the PMA is complete, the FDA will file the PMA. The FDA is subject to a performance goal review time for a PMA of 180 days from the date of filing, 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 that the PMA will ever be approved. Even if approved, the FDA may limit the indications for 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. There are some measurements reported by our *NMR LipoProfile* test that we have not submitted to the FDA for 510(k) clearance and which are therefore considered to be laboratory-developed tests. Although the FDA has stated that it has the regulatory authority to regulate laboratory-developed tests that are validated by the developing laboratory, it has generally exercised enforcement discretion and has not otherwise regulated most tests performed by laboratories that are certified under the Clinical Laboratory Improvement Amendments, or CLIA. When third-party laboratories using our *Vantera* system wish to deliver to their customers the LDT portion of our *NMR LipoProfile* test appearing on the second page of the report, we will still make the second-page test results available to them at no additional charge for dissemination along with the FDA-cleared first-page results. We will generate these second-page results in our clinical laboratory using either NMR spectrum data digitally sent to us by the third-party laboratory or a portion of the original blood sample that they send to us. We will then send the second-page results back to the third-party laboratories, which will report these results to their customer along with the first-page results. The second-page *NMR LipoProfile* test results cannot be performed at third-party laboratories. This division of LDT data collection and reporting of test results has not been endorsed or approved by the FDA or other regulatory agencies, and there can be no assurance that the FDA will continue to regard these as LDTs. Third-party laboratories utilizing or considering the utilization of the *Vantera* system may find the options for receiving the non-cleared portions of our test unacceptable, which may result in less use or adoption by third-party laboratories of the *Vantera* system, or less willingness to accept the placement of the *Vantera* system in their facilities in the first place.

In September 2007, the FDA published a draft guidance concerning laboratory-developed tests, or Draft Guidance, that is relevant to some of the tests we may develop in the future. The Draft Guidance describes the FDA' s position regarding potential regulation of a type of laboratory developed test known as *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.

Continuing FDA Regulation

Under the medical device regulations, the FDA regulates quality control and manufacturing procedures by requiring us to demonstrate and maintain compliance with the quality system regulation, which sets forth the

FDA' s current good manufacturing practices requirements for medical devices. The FDA monitors compliance with the quality system regulation and current good manufacturing practices requirements by conducting periodic inspections of manufacturing facilities. We could be subject to unannounced inspections by the FDA. Violations of applicable regulations noted by the FDA during inspections of our manufacturing facilities, or the manufacturing facilities of these third parties, could adversely affect the continued marketing of our tests.

The FDA also enforces post-marketing controls that include the requirement to submit medical device reports to the agency when a manufacturer becomes aware of information suggesting that any of its marketed products may have caused or contributed to a death, serious injury or serious illness or any of its products has malfunctioned and that a recurrence of a malfunction would likely cause or contribute to a death or serious injury or illness. The FDA relies on medical device reports to identify product problems and utilizes these reports to determine, among other things, whether it should exercise its enforcement powers. The FDA may also require postmarket surveillance studies for specified devices.

FDA regulations also govern, among other things, the preclinical and clinical testing, manufacture, distribution, labeling and promotion of medical devices. In addition to compliance with good manufacturing practices and medical device reporting requirements, we will be required to comply with the FDCA' s general controls, including establishment registration, device listing and labeling requirements. If we fail to comply with any requirements under the FDCA, we could be subject to, among other things, fines, injunctions, civil penalties, recalls or product corrections, total or partial suspension of production, denial of premarket notification clearance or approval of products, rescission or withdrawal of clearances and approvals, and criminal prosecution. We cannot assure you that any final FDA policy, once issued, or future laws and regulations concerning the manufacture or marketing of medical devices will not increase the cost and time to market of new or existing tests. Furthermore, any current or future federal and state regulations also will apply to future tests developed by us.

If our promotional activities fail to comply with these FDA regulations or guidelines, we may be subject to warnings from, or enforcement action by, these authorities. In addition, our failure to follow FDA rules and guidelines relating to promotion and advertising may cause the FDA to issue warning letters or untitled letters, suspend or withdraw a product from the market, require a recall or institute fines or civil fines, or could result in disgorgement of money, operating restrictions, injunctions or criminal prosecution.

Advertising

Advertising of our tests is subject to regulation by the Federal Trade Commission, or FTC, under the FTC Act. The FTC Act prohibits unfair or deceptive acts or practices in or affecting commerce. Violations of the FTC Act, such as failure to have substantiation for product claims, would subject us to a variety of enforcement actions, including compulsory process, cease and desist orders and injunctions, which can require, among other things, limits on advertising, corrective advertising, consumer redress and restitution, as well as substantial fines or other penalties. Any enforcement actions by the FTC could have a material adverse effect our business.

Laboratory Certification, Accreditation and Licensing

We have obtained all federal and state licenses, certificates and permits necessary to conduct our diagnostic testing business. CLIA requires us and most clinical laboratories operating in the United States to maintain federal certification. The State of North Carolina also requires us to maintain a laboratory license. In addition, the laws of some states require licensure for our laboratory, even though we do not operate a laboratory in those states.

CLIA imposes requirements relating to test processes, personnel qualifications, facilities and equipment, record keeping, quality assurance and participation in proficiency testing, which involves comparing the results of tests on specimens that have been specifically prepared for our laboratory to the known results of the specimens. The CLIA requirements also apply as a condition for participation by clinical laboratories under the

Medicare program. Under the CLIA regulations, the complexity of the tests performed determines the level of regulatory control. The U.S. Department of Health and Human Services, or HHS, classifies our *NMR LipoProfile* test as a high-complexity test. As a result, we must employ more experienced and highly educated personnel, as well as additional categories of employees.

HHS or an organization to which HHS delegates authority verifies compliance with CLIA standards through periodic on-site inspections. Sanctions for failure to meet these certification, accreditation and licensure requirements include suspension or revocation of the certification, accreditation or license, as well as imposition of plans to correct deficiencies, injunctive actions and civil monetary and criminal penalties. If HHS should remove or suspend our CLIA certificate, we would be forced to cease performing testing.

We are also accredited by the College of American Pathologists, or CAP. 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 and their Business Associates must have in place administrative, physical, and technical standards to guard against the misuse of individually identifiable health information. Because we are a healthcare provider and we conduct certain healthcare transactions electronically, we are presently a Covered Entity, and we must have in place the administrative, physical, and technical safeguards required by HIPAA, HITECH and their implementing regulations. 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 may perform future activities that may implicate HIPAA, such as providing clinical laboratory testing services or entering into specific kinds of relationships with a Covered Entity or a Business Associate of a Covered Entity.

If we or our operations are found to be in violation of HIPAA, HITECH or their implementing regulations, we may be subject to penalties, including civil and criminal penalties, fines, and exclusion from participation in U.S. federal or state health care programs, and the curtailment or restructuring of our operations. HITECH increased the civil and criminal penalties that may be imposed against Covered Entities, their Business Associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney' s fees and costs associated with pursuing federal civil actions.

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.

Federal and State Billing and Fraud and Abuse Laws

Antifraud Laws/Overpayments. As participants in federal and state healthcare programs, we are subject to numerous federal and state antifraud and abuse laws. Many of these antifraud laws are broad in scope, and neither the courts nor government agencies have extensively interpreted these laws. Prohibitions under some of these laws include:

the submission of false claims or false information to government programs;

deceptive or fraudulent conduct;

excessive or unnecessary services or services at excessive prices; and

prohibitions in defrauding private sector health insurers.

We could be subject to substantial penalties for violations of these laws, including denial of payment and refunds, suspension of payments from Medicare, Medicaid or other federal healthcare programs and exclusion from participation in the federal healthcare programs, as well as civil monetary and criminal penalties and imprisonment. One of these statutes, the False Claims Act, is a key enforcement tool used by the government to combat healthcare fraud. The False Claims Act imposes liability on any person who, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. In addition, violations of the federal physician self-referral laws, such as the Stark laws discussed below, may also violate false claims laws. Liability under the False Claims Act can result in treble damages and imposition of penalties. For example, we could be subject to penalties of $5,500 to $11,000 per false claim, and each use of our product could potentially be part of a different claim submitted to the government. Separately, the HHS office of the Office of Inspector General, or OIG, can exclude providers found liable under the False Claims Act from participating in federally funded healthcare programs, including Medicare. The steep penalties that may be imposed on laboratories and other providers under this statute may be disproportionate to the relatively small dollar amounts of the claims made by these providers for reimbursement. In addition, even the threat of being excluded from participation in federal healthcare programs can have significant financial consequences on a provider.

Numerous federal and state agencies enforce the antifraud and abuse laws. In addition, private insurers may also bring private actions. In some circumstances, private whistleblowers are authorized to bring fraud suits on behalf of the government against providers and are entitled to receive a portion of any final recovery.

Federal and State "Self-Referral" and "Antikickback" Restrictions

Self-Referral law. We are subject to a federal "self-referral" law, commonly referred to as the "Stark" law, which provides that physicians who, personally or through a family member, have ownership interests in or compensation arrangements with a laboratory are prohibited from making a referral to that laboratory for laboratory tests reimbursable by Medicare, and also prohibits laboratories from submitting a claim for Medicare payments for laboratory tests referred by physicians who, personally or through a family member, have ownership interests in or compensation arrangements with the testing laboratory. The Stark law contains a number of specific exceptions which, if met, permit physicians who have ownership or compensation arrangements with a testing laboratory to make referrals to that laboratory and permit the laboratory to submit claims for Medicare payments for laboratory tests performed pursuant to such referrals.

We are subject to comparable state laws, some of which apply to all payors regardless of source of payment, and do not contain identical exceptions to the Stark law. For example, we are subject to a North Carolina self-referral law that prohibits a physician investor from referring to us any patients covered by private, employer-funded or state and federal employee health plans. The North Carolina self-referral law contains few exceptions for physician investors in securities that have not been acquired through public trading, but will generally permit us to accept referrals from physician investors who buy their shares in the public market.

We have several stockholders who are physicians in a position to make referrals to us. We have included within our compliance plan procedures to identify requests for testing services from physician investors and we do not bill Medicare, or any other federal program, or seek reimbursement from other third-party payors, for these tests. The self-referral laws may cause some physicians who would otherwise use our laboratory to use other laboratories for their testing.

Providers are subject to sanctions for claims submitted for each service that is furnished based on a referral prohibited under the federal self-referral laws. These sanctions include denial of payment and refunds, civil

monetary payments and exclusion from participation in federal healthcare programs and civil monetary penalties, and they may also include penalties for applicable violations of the False Claims Act, which may require payment of up to three times the actual damages sustained by the government, plus civil penalties of $5,500 to $11,000 for each separate false claim. Similarly, sanctions for violations under the North Carolina self-referral laws include refunds and monetary penalties.

Anti-Kickback Statute. The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs. The term "remuneration" is not defined in the federal Anti-Kickback Statute and has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payment, ownership interests and providing anything at less than its fair market value. The reach of the Anti-Kickback Statute was also broadened by the Patient Protection and Affordable Care Act of 2010, or PPACA, which, among other things, amends the intent requirement of the federal Anti-Kickback Statute and certain criminal healthcare fraud statutes, effective March 23, 2010. Pursuant to the statutory amendment, a person or entity does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA provides that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. Sanctions for violations of the federal Anti-Kickback Statute may include imprisonment and other criminal penalties, civil monetary penalties and exclusion from participation in federal healthcare programs.

The OIG has criticized a number of the business practices in the clinical laboratory industry as potentially implicating the Anti-Kickback Statute, including compensation arrangements intended to induce referrals between laboratories and entities from which they receive, or to which they make, referrals. In addition, the OIG has indicated that "dual charge" billing practices that are intended to induce the referral of patients reimbursed by federal healthcare programs may violate the Anti-Kickback Statute.

Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs, and do not contain identical safe harbors. For example, North Carolina has an anti-kickback statute that prohibits healthcare providers from paying any financial compensation for recommending or securing patient referrals. Penalties for violations of this statute include license suspension or revocation or other disciplinary action. Other states have similar anti-kickback prohibitions.

Both the federal Anti-Kickback Statute and the North Carolina anti-kickback law are broad in scope. The anti-kickback laws clearly prohibit payments for patient referrals. Under a broad interpretation, these laws could also prohibit a broad array of practices involving remuneration where one party is a potential source of referrals for the other.

If we or our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in U.S. federal or state health care programs, and the curtailment or restructuring of our operations. To the extent that any product we make is sold in a foreign country in the future, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals. To reduce the risks associated with these various laws and governmental regulations, we have implemented a compliance plan. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. Any action against us for violation of these laws,

even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management' s attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

Other Laws

Occupational Safety and Health. The State of North Carolina has an OSHA-approved state occupational safety and health plan allowing it to impose stricter worker health and safety standards than those promulgated by the federal Occupational Safety and Health Administration, or OSHA. In addition to their comprehensive regulation of health and safety in the workplace in general, OSHA and the North Carolina Department of Labor Occupational Safety and Health Division have established extensive requirements aimed specifically at laboratories and other healthcare-related facilities. In particular, both agencies have implemented regulations intended to protect workers who may be exposed to bloodborne pathogens, such as HIV and hepatitis B, and other potentially infectious materials. In addition, because our operations require employees to use certain hazardous chemicals, we also must comply with regulations on hazard communication and hazardous chemicals in laboratories. These regulations require us, among other things, to develop written programs and plans, which must address methods for preventing and mitigating employee exposure, the use of personal protective equipment, and training.

Specimen Transportation. We also are subject to regulations of the Department of Transportation, the United States Postal Service and the CDC which apply to the surface and air transportation of clinical laboratory specimens.

Environmental Compliance. We handle and dispose of human fluids and medical waste, such as vials and needles, in connection with our operations. The fluids and waste are treated as biohazardous material. We must comply with numerous federal, state and local statutes and regulations, particularly, to the extent applicable, the Medical Waste Tracking Act of 1988 and the Resource Conservation and Recovery Act. The statutes with which we must comply relate to public health and the environment, including practices and procedures for labeling, handling and storage of, and public disclosure requirements regarding, medical waste, hazardous and toxic materials or other substances generated by operation of clinical laboratories. We must also comply with environmental protection requirements, such as standards relating to the discharge of pollutants into the air, water and land, emergency response and remediation or cleanup in connection with medical waste, hazardous and toxic materials or other substances.

Employees

As of December 31, 2012, we had 204 employees. None of our employees are represented by a labor union or covered under a collective bargaining agreement, nor have we experienced any work stoppages. We consider our employee relations to be good.

Facilities

Our corporate headquarters and operations, including our laboratory facility, are located in Raleigh, North Carolina, where we currently lease approximately 83,000 square feet of office and lab space. The lease on this facility expires in September 2022. Our current rent under this lease is approximately $1.2 million annually, subject to annual increases.

We believe that our current facilities are suitable and adequate to meet our current needs and that suitable additional or substitute space will be available to accommodate future growth of our business.

Legal Proceedings

We are not currently a party to any pending legal proceedings that we believe will have a material adverse effect on our business or financial condition. However, we may be subject to various claims and legal actions arising in the ordinary course of business from time to time.

MANAGEMENT

Directors and Executive Officers

The following table sets forth information concerning our directors and executive officers, including their ages as of January 1, 2013:

Name	Age	Position
Richard O. Brajer	52	President, Chief Executive Officer and Director
Lucy G. Martindale	58	Executive Vice President and Chief Financial Officer
James D. Otvos, Ph.D.	65	Executive Vice President and Chief Scientific Officer
Timothy J. Fischer	50	Chief Operating Officer
Thomas S. Clement	58	Vice President, Regulatory and Quality Affairs
Paul C. Sanders	47	Vice President, Sales
E. Duffy McDonald	59	Vice President, Human Resources and Organizational Effectiveness
Robert M. Honigberg	52	Vice President, Medical Affairs and Chief Medical Officer
Ashok D. Marin	44	Vice President, General Counsel, Secretary and Chief Compliance Officer
Buzz Benson	58	Chairman of the Board of Directors
Charles A. Sanders, M.D.	80	Director and Chairman Emeritus
Robert J. Greczyn, Jr.	61	Director
Christopher W. Kersey, M.D.	43	Director
John H. Landon	72	Director
Daniel J. Levangie	62	Director
Woodrow A. Myers, Jr., M.D.	58	Director
Roderick A. Young	69	Director

Executive Officers

Richard O. Brajer

Mr. Brajer has served as our President and Chief Executive Officer and a member of our board of directors since 2003. From 1990 to 2003, Mr. Brajer was with Becton Dickinson and Company, or BD, a medical technology company, where he served in a number of senior management positions, both in the United States and in Europe, ultimately serving as president of BD' s worldwide diagnostic business. He also served as a corporate officer of BD. From 1987 to 1990, Mr. Brajer served as a consultant with McKinsey & Company. He began his career as a product development engineer with the Procter & Gamble Company. Mr. Brajer received a B.S. degree in chemical engineering from Purdue University and an M.B.A. degree from Stanford University. The board of directors believes that Mr. Brajer' s knowledge of our company from serving as our chief executive officer and his industry experience with medical device and diagnostic companies prior to joining our company allow him to make valuable contributions to the board.

Lucy G. Martindale

Ms. Martindale has served as our Executive Vice President and Chief Financial Officer since 2001. From 1996 to 2001, she served as Vice President and Finance Director of GlaxoWellcome Research & Development, a pharmaceutical research and development company. Ms. Martindale held various positions with GlaxoWellcome, Inc., a pharmaceutical company, from 1984 to 1996, including vice president, corporate planning and analysis. Prior to joining Glaxo, Ms. Martindale worked at Bristol-Myers Squibb, a pharmaceutical company, and American Hospital Supply Corporation, a supplier of hospital equipment and products. Ms. Martindale received a B.S. degree in business from Indiana University and an M.B.A. degree from Campbell University.

James D. Otvos, Ph.D.

Dr. Otvos is a founder of our company and has served as our Chief Scientific Officer since its inception. He has also served as Executive Vice President since 1999 and as a member of our board of directors until March 2011. From 1990 to 2000, Dr. Otvos was a professor of biochemistry at North Carolina State University, where he is currently an adjunct professor. Dr. Otvos received a Ph.D. degree in comparative biochemistry from the University of California-Berkeley and performed his postdoctoral training in molecular biophysics at Yale University.

Timothy J. Fischer

Mr. Fischer has served as our Chief Operating Officer since January 2012 and previously served as our Vice President of Research and Development from September 2010 to January 2012. From December 2006 to September 2010, Mr. Fischer was with BD, where he served as vice president of development for BD' s women' s health and cancer business. From 2003 to December 2006, he served as Vice President of Product Development for TriPath Oncology, a diagnostic company in the field of women' s health. Mr. Fischer received a B.S. degree in biology from Indiana University. He is an inventor on more than 35 patents in the *in vitro* diagnostics field.

Thomas S. Clement

Mr. Clement has served as our Vice President of Regulatory and Quality Affairs since February 2011. From January 2009 to January 2011, he served as Vice President of Global Regulatory and Clinical Affairs for QIAGEN N.V., a provider of sample and assay technology. From 2002 to 2008, Mr. Clement was Vice President of Quality and Regulatory Affairs for Roche Molecular Systems. From 1989 to 2002, he was Director of Regulatory Affairs for Organon Teknika Corporation. From 1988 to 1989, he served as Manager of Regulatory Affairs for Amersham, and from 1984 to 1988, he was Manager of Quality for Biotech Research Laboratories. Mr. Clement received a B.S. degree in business administration from the University of Maryland.

Paul C. Sanders

Mr. Sanders has served as our Vice President of Sales since October 2012 and previously served as our Vice President of Sales and Marketing from February 2008 to July 2011 and Vice President of Sales and Service from July 2011 to October 2012. From 2006 to 2008, Mr. Sanders was vice president of sales for the cardio-peripheral division at ev3, Inc., an endovascular technology company. From 2000 to 2006, he held several sales, marketing and management positions, including director of marketing and director of sales at Abbott Vascular Devices, director of marketing for the Spine & Neuro Division of Sofamor Danek (a Medtronic company), several positions in sales and marketing at Boston Scientific, and several sales and management positions at U.S. Surgical. Mr. Sanders received a B.S. degree from the University of North Carolina at Chapel Hill.

E. Duffy McDonald

Mr. McDonald has served as our Vice President of Human Resources and Organizational Effectiveness since October 2012 and before that was our Vice President of Operations and Human Resources from 2008 to October 2012 and our Vice President of Human Resources from 2003 to 2008. From 1994 to 2003, he served as vice president of organizational solutions for the Newton Instrument Company. From 1991 to 1994, he served as director of human resources for VDO‑Yazaki Corporation. From 1976 to 1991, he was with Minnesota Mining and Manufacturing Company (3M), where he held several management positions. Mr. McDonald received a B.S. degree in sociology from the College of Charleston. Mr. McDonald is a certified Senior Professional in Human Resources.

Robert M. Honigberg, M.D.

Dr. Honigberg has served as our Vice President of Medical Affairs and Chief Medical Officer since October 2011. From May 2009 to September 2011, Dr. Honigberg served as Chief Medical Officer for Research & Measurement for URAC, formerly known as the Utilization Review Accreditation Commission, an accreditation

commission in Washington, D.C., and as a consultant to a number of start-up companies in diagnostics, devices and healthcare delivery. From April 2006 to April 2009, Dr. Honigberg was the Chief Medical Officer, Global Medical Affairs and Clinical Strategy, for GE Healthcare, and from 1999 to 2006, he was the Chief Medical Officer and Vice President of Medical and Clinical Affairs at Ethicon Endo-Surgery, a Johnson & Johnson operating company. Prior to 1999, Dr. Honigberg also directed clinical trials, medical affairs operations and strategy for Ortho Biotech and Schering-Plough. Dr. Honigberg received a B.A. degree in economics from Duke University, an M.D. degree from the Feinberg School of Medicine of Northwestern University and an M.B.A. degree from Northwestern University.

Ashok D. Marin

Mr. Marin has served as our Vice President, General Counsel, Chief Compliance Officer and Secretary since June 2012. From February 2010 to June 2012, Mr. Marin was Senior Counsel, Global Compliance for the medical diagnostics business of GE Healthcare, a diversified healthcare business. From 2001 to February 2010, Mr. Marin served in the legal department of Sanofi U.S., a pharmaceutical company, in roles of increasing responsibility, most recently as Assistant General Counsel. He received B.A and J.D. degrees from Fordham University.

Non-Management Directors

Buzz Benson

Mr. Benson has served as a director of our company since 2001 and as chairman of the board since June 2011. Mr. Benson is a managing director and president of SightLine Partners LLC, a venture capital firm that invests in emerging growth medical technology companies. SightLine Partners was formed in 2004 to acquire the healthcare venture capital funds of Piper Jaffray Ventures. Prior to co-founding SightLine Partners, he was a Managing Director and President of Piper Jaffray Ventures from 1992 to 2004. From 1986 to 1992, he was co-head of the Piper Jaffray healthcare investment banking group. Prior to joining Piper Jaffray in 1986, Mr. Benson was a partner at Stonebridge Capital, a partnership investing in emerging publicly traded companies. Previously, he was an investment officer with Cherry Tree Ventures and a manager in the public accounting firm of Arthur Andersen & Co. Mr. Benson holds a B.S. degree in accounting from St. John' s University and is a Certified Public Accountant. The board of directors believes that Mr. Benson' s knowledge of our company, his financial and accounting expertise and his extensive experience in capital markets and investment management allow him to make valuable contributions to the board.

Charles A. Sanders, M.D.

Dr. Sanders has served as a director of our company since 2001 and served as chairman of the board from 2002 to June 2011. He currently serves as chairman emeritus of our board of directors. Dr. Sanders is retired from Glaxo, Inc. (now GlaxoSmithKline), a pharmaceutical company, where he served as chief executive officer from 1989 to 1994 and chairman of the board from 1992 to 1995. Before joining Glaxo, Dr. Sanders spent eight years with Squibb Corp., where he held a number of posts, including the positions of vice chairman, chief executive officer of the science and technology group and chairman of the science and technology committee of the board of directors. Previously, Dr. Sanders was general director of Massachusetts General Hospital and professor of medicine at Harvard Medical School. Dr. Sanders is a director of BioCryst Pharmaceuticals, Inc. and Biodel Inc. Within the last five years, Dr. Sanders has also served as a director of Cephalon, Inc., BioPure Corporation, Trimeris, Inc., Genentech, Inc., Fisher Scientific International, Inc., and Vertex Pharmaceuticals Incorporated. He is currently a member of GlaxoSmithKline Foundation, the Institute of Medicine of the National Academy of Sciences, a member of the CSIS Board of Trustees, chairman emeritus of Project HOPE and chairman of the Foundation for the National Institutes of Health. Dr. Sanders is also a past chairman of the New York Academy of Sciences, past chairman of The Commonwealth Fund, past chairman of the University of North Carolina Healthcare System, and past chairman of the Overseers Committee to Visit the Harvard Medical School. Dr. Sanders received his M.D. degree from Southwestern Medical College of the University of Texas. The board believes that Dr. Sanders, with more than 50 years of experience in both academic medicine and the

pharmaceutical and biotechnology industries, brings in-depth knowledge of both medical and business issues to our board. In addition, through his service as a director on numerous high-profile corporate boards, Dr. Sanders has extensive and valuable corporate governance, board oversight and transactional experience.

Robert J. Greczyn, Jr.

Mr. Greczyn has served as a director of our company since March 2011. From 2000 to 2010, he was the chief executive officer of Blue Cross Blue Shield of North Carolina, where he also served on the board of the Blue Cross Blue Shield Association and chaired several committees. From 2006 to 2008, Mr. Greczyn was chairman of the board of the Council for Affordable Quality Care, an alliance of chief executive officers of the nation' s leading health insurers working to simplify healthcare transactions. Mr. Greczyn received an M.P.H. degree in health policy from the University of North Carolina at Chapel Hill and a B.A. degree in psychology from East Carolina University. The board believes that Mr. Greczyn' s extensive executive management experience, his knowledge of the managed care industry and significant academic involvement within the public health arena bring valuable insight to the board.

Christopher W. Kersey, M.D.

Dr. Kersey has served as a director of our company since 2009. He currently serves as a managing member of Camden Partners Holdings, LLC, a venture capital firm focusing on the healthcare and life science industries, which he joined in 2008. From December 2009 to July 2010, he served on the board of directors of Pet DRx Corporation, a provider of veterinary care services. He also serves on the board of trustees of The Johns Hopkins University School of Medicine and the board of trustees of The Johns Hopkins Hospital. From 2006 to 2008, Mr. Kersey was the chief business development officer and chief medical officer of RediClinic LLC, an operator of retail-based medical clinics. Prior to joining RediClinic, he served as a managing director from 2002 to 2006 of Cogene Ventures, a healthcare and life science late-stage venture capital fund. Mr. Kersey began his career in 1998 as an associate at Menlo Ventures, where he focused on healthcare and life science investments. His clinical research background includes fellowships at the National Institutes of Health and the Emory University School of Medicine, where he focused on molecular biology and cardiovascular surgery, respectively. Mr. Kersey received a B.A. degree from Stanford University, an M.D. degree from the Emory University School of Medicine and an M.B.A. degree from Harvard Business School. The board believes that Dr. Kersey' s background as a medical doctor, his expertise in capital markets and investment management and his extensive experience in the healthcare and life science industries make him a valuable addition to the board.

John H. Landon

Mr. Landon has served as a director of our company since 2007. Mr. Landon served as the vice president and general manager of Medical Products for E.I. DuPont de Nemours and Company, or DuPont, from 1992 until his retirement in 1996. Prior to that, Mr. Landon served in various capacities at DuPont, including vice president and general manager, diagnostics and biotechnology from 1990 to 1992, director of diagnostics from 1988 to 1990, business director of diagnostic imaging from 1985 to 1988 and in various other professional and management positions from 1962 to 1985. Mr. Landon served as chairman of the board of Cholestech Corporation prior to its 2007 sale to Inverness Medical and as a director of Digene Corporation prior to its 2007 sale to QIAGEN. He currently is a member of the board of AspenBio Pharma, Inc., a publicly held pharmaceutical company, a trustee and member of the governance committee of Christiana Care Health System, a diversified healthcare delivery company, and an advisor to Water Street Health Care Partners. Mr. Landon received a B.S. degree in chemical engineering from the University of Arizona. The board believes that Mr. Landon' s breadth of management experience in the healthcare and life sciences industries allows him to contribute effectively to the board.

Daniel J. Levangie

Mr. Levangie has served as a director of our company since November 2010. He currently serves as a director of and as chief executive officer of Dune Medical Devices, Inc., a privately held medical device

company. He also serves as principal and managing partner of Constitution Medical Investors, Inc., a private investment firm focused on healthcare sector-related acquisitions. Mr. Levangie served as president, chief executive officer and a director of Keystone Dental, a dental implant device company, from March 2009 until March 2011. From 2008 to 2009, he served as executive vice president of Cytyc Corporation, a medical equipment and device company targeting women' s health and cancer, and president of Cytyc Surgical Products, a wholly-owned subsidiary of Cytyc, from July 2006 until the acquisition of Cytyc by Hologic, Inc. in October 2007. Prior to July 2006, Mr. Levangie held several positions with Cytyc, including executive vice president and chief commercial officer from 2004 to 2006, chief executive officer and president of Cytyc Health Corporation from 2002 to 2003 and executive vice president and chief operating officer from 2000 to 2002. Prior to joining Cytyc in 1994, Mr. Levangie was employed in several sales and marketing positions by Abbott Laboratories, a diversified healthcare company. Mr. Levangie is currently a director of Exact Sciences Corp., a publicly held diagnostics company, and Insulet Corporation, a publicly held medical device company. During the last five years, he also served as a director of ev3, Inc., Cytyc and Hologic. Mr. Levangie received a B.S. degree in pharmacy from Northeastern University. The board believes that Mr. Levangie brings a wealth of executive, managerial and leadership experience in the diagnostics and medical device industries to our board from his prior service as an executive officer and director of a publicly held diagnostics and medical device company, and his service on several other medical device company boards of directors.

Woodrow A. Myers, Jr., M.D.

Dr. Myers has served as a director of our company since March 2011. He has served as managing director of Myers Ventures LLC, a healthcare and education consulting company, since December 2005. He was the executive vice president and chief medical officer of WellPoint, Inc., a commercial health benefits company, from 2000 to 2005. From 1995 to 2000, Dr. Myers also served as the director of healthcare management at the Ford Motor Company. Dr. Myers currently serves as a director of Express Scripts, Inc. and Genomic Health, Inc. and serves as the chairman of the board of the Mozambique Healthcare Consortium. In addition, Dr. Myers has served as a director of other public companies within the last five years, including ThermoGenesis Corp. from June 2006 to December 2009 and CardioNet, Inc. from August 2007 to May 2009. He is a former health commissioner for New York City and the State of Indiana, past chairman of the visiting committee for the Harvard School of Public Health and has served as a member of the Harvard University Board of Overseers and the Stanford University Board of Trustees. Dr. Myers holds a B.S. degree in biological sciences from Stanford University, an M.D. degree from Harvard Medical School and an M.B.A. degree from Stanford University. The board believes that, as a medical doctor, Dr. Myers brings both medical and management experience to our board, including extensive experience in the healthcare industry in general, where he has over ten years experience as a corporate executive officer, and in the diagnostics and medical device industries in particular.

Roderick A. Young

Mr. Young has served as a director of our company since 2008. Mr. Young has been a venture partner of Three Arch Partners since May 2006. He served as a director of North American Scientific, Inc., a publicly held medical device company, from 2006 to 2009. From 2003 to 2005, Mr. Young was president and chief executive officer of Vivant Medical, Inc., a venture-backed medical device company that was acquired by Tyco International, Ltd. Prior to his tenure at Vivant, Mr. Young was president and chief executive officer of Targesome, Inc., a biotechnology company, from 1998 to 2002. Prior to Targesome, Mr. Young also served as chairman and chief executive officer of General Surgical Innovations, a medical device company; president and chief executive officer of Focus Surgery; president of Toshiba America MRI; and president and chief operating officer of Diasonics. Mr. Young received a B.S. degree in industrial engineering from Stanford University and an M.B.A. degree from Harvard Business School. The board believes that Mr. Young' s prior management experience, his expertise in capital markets and investment management and his extensive experience in the healthcare and life science industries make him qualified to serve on our board.

Board Composition

Our board of directors currently consists of nine members. Each director is currently elected to the board for a one-year term, to serve until the election and qualification of successor directors at the annual meeting of stockholders, or until the director' s earlier removal, resignation or death.

Our directors currently serve on the board pursuant to the voting provisions of our second amended and restated investor rights agreement between us and several of our stockholders. Pursuant to the investor rights agreement, these stockholders have agreed to vote all shares of our capital stock that they own to cause and maintain the election to the board of directors of the company of:

- the then-incumbent president and chief executive officer;
- one representative of the holders of Series A preferred stock, Series A-1 preferred stock, Series B preferred stock, Series B-1 preferred stock, Series C preferred stock and Series C-1 preferred stock collectively;
- two directors nominated collectively by the holders of Series D preferred stock and Series D-1 preferred stock;
- one director nominated by Three Arch Capital, L.P.;
- one director nominated by Camden Partners; and
- four outside directors designated by the vote of at least 70% of the other directors then in office.

The voting provisions of the investor rights agreement will terminate upon the completion of this offering and there will be no further contractual obligations regarding the election of our directors.

In accordance with our amended and restated certificate of incorporation, which will be in effect immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- Class I, which will consist of Drs. Kersey and Sanders and Mr. Young, whose term will expire at our first annual meeting of stockholders to be held after the completion of this offering;
- Class II, which will consist of Messrs. Brajer, Landon and Levangie, whose term will expire at our second annual meeting of stockholders to be held after the completion of this offering; and
- Class III, which will consist of Messrs. Benson and Greczyn and Dr. Myers, whose term will expire at our third annual meeting of stockholders to be held after the completion of this offering.

Our amended and restated bylaws, which will become effective upon completion of this offering, will provide that the authorized number of directors may be changed only by resolution approved by a majority of the board. 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.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

Director Independence

In June 2011, our board of directors undertook a review of the independence of the directors and considered whether any director has a material relationship with us that could compromise his ability to exercise independent judgment in carrying out his responsibilities. As a result of this review, our board of directors determined that

Messrs. Benson, Young, Greczyn, Landon and Levangie and Drs. Sanders, Myers and Kersey, representing eight of our nine directors, are "independent directors" as defined under NASDAQ rules and the independence requirements of Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Board Leadership Structure

Our board of directors has an independent chairman, Mr. Benson, who has authority, among other things, to call and preside over board meetings, including meetings of the independent directors, to set meeting agendas and to determine materials to be distributed to the board. Accordingly, the board chairman has substantial ability to shape the work of the board. We believe that separation of the positions of board chairman and chief executive officer reinforces the independence of the board in its oversight of the business and affairs of our company. In addition, we believe that having an independent board chairman creates an environment that is more conducive to objective evaluation and oversight of management' s performance, increasing management accountability and improving the ability of the board to monitor whether management' s actions are in the best interests of the company and its stockholders. As a result, we believe that having an independent board chairman can enhance the effectiveness of the board as a whole.

Role of the Board in Risk Oversight

Our audit committee is primarily responsible for overseeing our risk management processes on behalf of the full board of directors. Going forward, we expect that the audit committee will receive reports from management at least quarterly regarding our assessment of risks. In addition, the audit committee reports regularly to the full board of directors, which also considers our risk profile. The audit committee and the full board of directors focus on the most significant risks we face and our general risk management strategies. While the board oversees our risk management, company management is responsible for day-to-day risk management processes. Our board expects company management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-day activities and to effectively implement risk management strategies adopted by the audit committee and the board. We believe this division of responsibilities is the most effective approach for addressing the risks we face and that our board leadership structure supports this approach.

Committees of the Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and governance committee, each of which has the composition and responsibilities described below. From time to time, the board may establish other committees to facilitate the management of our business.

Audit Committee

Our audit committee reviews our internal accounting procedures, oversees the integrity of our financial statements and financial reporting and compliance with legal and regulatory requirements and evaluates our audit processes. Our audit committee confers with our independent registered public accountants and internal auditors, if any, regarding audit procedures, including proposed scope of examination, audit results and related management letters. Our audit committee consists of four directors, Messrs. Benson, Young, Levangie and Greczyn. Mr. Benson is the chairman of the audit committee and our board of directors has determined that Mr. Benson is an "audit committee financial expert" as defined by SEC rules and regulations. Our board of directors has determined that the composition of our audit committee meets the criteria for independence under, and the functioning of our audit committee complies with, the applicable requirements of the Sarbanes-Oxley Act, applicable requirements of the NASDAQ listing rules and SEC rules and regulations. Mr. Young is a Venture Partner with Three Arch Partners, a stockholder who we expect to beneficially own more than 10% of our common stock following this offering. Therefore, we may not be able to rely upon the safe harbor position of Rule 10A-3 under the Exchange Act, which provides that a person will not be deemed to be an affiliate of a company if he or she is not the beneficial owner, directly or indirectly, of more than 10% of a class of voting

equity securities of that company. However, our board of directors has made an affirmative determination that Mr. Young is not an affiliate of our company. We intend to continue to evaluate the requirements applicable to us and we intend to comply with the future requirements to the extent that they become applicable to our audit committee. The principal duties and responsibilities of our audit committee include:

- appointing and retaining an independent registered public accounting firm to serve as independent auditor to audit our financial statements, overseeing the independent auditor' s work and determining the independent auditor' s compensation;
- if appropriate, appointing and retaining a registered public accounting firm to serve as internal auditors to assess the effectiveness of our internal control over financial reporting and other compliance matters that our Audit Committee deems appropriate, overseeing the internal auditor' s work and determining the internal auditor' s compensation;
- approving in advance all audit services and non-audit services to be provided to us by our independent auditor;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls, auditing or compliance matters, as well as for the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters;
- reviewing and discussing with management and our independent auditor the results of the annual audit and the independent auditor' s review of our quarterly financial statements; and
- conferring with management, our independent auditor and internal auditors about the scope, adequacy and effectiveness of our internal accounting controls, the objectivity of our financial reporting and our accounting policies and practices.

Compensation Committee

Our compensation committee reviews and determines the compensation of all our executive officers. Our compensation committee consists of four directors, Messrs. Greczyn, Landon, Young and Dr. Kersey, each of whom is a non-employee member of our board of directors as defined in Rule 16b-3 under the Exchange Act and an outside director as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, or the Code. Mr. Greczyn is the chairman of the compensation committee. Our board of directors has determined that the composition of our compensation committee satisfies the applicable independence requirements under, and the functioning of our compensation committee complies with the applicable requirements of, the NASDAQ listing rules and SEC rules and regulations. We intend to continue to evaluate and intend to comply with all future requirements applicable to our compensation committee. The principal duties and responsibilities of our compensation committee include:

- establishing and approving, and making recommendations to the board of directors regarding, performance goals and objectives relevant to the compensation of our chief executive officer, evaluating the performance of our chief executive officer in light of those goals and objectives and setting, or recommending to the full board of directors for approval, the chief executive officer' s compensation, including incentive-based and equity-based compensation, based on that evaluation;
- setting the compensation of our other executive officers, based in part on recommendations of the chief executive officer;
- exercising administrative authority under our stock plans and employee benefit plans; and
- establishing policies and making recommendations to our board of directors regarding director compensation.

Nominating and Governance Committee

The nominating and governance committee consists of four directors, Dr. Myers and Messrs. Benson, Levangie and Landon. Mr. Levangie is the chairman of the nominating and governance committee. Our board of

directors has determined that the composition of our nominating and governance committee satisfies the applicable independence requirements under, and the functioning of our nominating and governance committee complies with the applicable requirements of, the NASDAQ listing rules and SEC rules and regulations. We will continue to evaluate and will comply with all future requirements applicable to our nominating and governance committee. The nominating and governance committee' s responsibilities include:

- assessing the need for new directors and identifying individuals qualified to become directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board' s committees;
- assessing individual director participation and qualifications;
- developing and recommending to the board corporate governance principles;
- monitoring the effectiveness of the board and the quality of the relationship between management and the board; and
- overseeing an annual evaluation of the board' s performance.

The nominating and governance committee believes that candidates for director should possess, among other things, integrity, independence, diversity of experience, leadership and the ability to exercise sound judgment. In its review of candidates, the nominating and governance committee also considers such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of the company, demonstrated excellence in his or her field and having the commitment to rigorously represent the long-term interests of the company' s stockholders. However, the nominating and governance committee retains the right to modify these qualifications from time to time.

Candidates for director nominees are reviewed in the context of the current composition of the board, the operating requirements of the company and the long-term interests of stockholders. In conducting this review, the nominating and governance committee typically considers diversity, age, skills and such other factors as it deems appropriate given the current needs of the board and the company, to maintain a balance of knowledge, experience and capability. In the case of incumbent directors whose terms of office are scheduled to expire, the nominating and governance committee reviews these directors' overall service to the company during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors' independence. The current composition of the board is dictated by the voting provisions of our investor rights agreement, although this agreement will terminate upon the completion of this offering.

Code of Business Conduct and Ethics for Employees, Executive Officers and Directors

We have adopted a Code of Business Conduct and Ethics, or the Code of Conduct, applicable to all of our employees, executive officers and directors. Following the completion of this offering, the Code of Conduct will be available on our website at *www.liposcience.com*. The nominating and governance committee of our board of directors will be responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for employees, executive officers or directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website.

Compensation Committee Interlocks and Insider Participation

None of our directors who currently serve as members of our compensation committee is, or has at any time during the past year been, one of our officers or employees. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving on our board of directors or compensation committee.

Risk Assessment and Compensation Practices

Our management assessed and discussed with our compensation committee our compensation policies and practices for our employees as they relate to our risk management and, based upon this assessment, we do not believe there are risks arising from such policies and practices that are reasonably likely to have a material adverse effect on us.

Our employees' base salaries are fixed in amount and thus we do not believe that they encourage excessive risk-taking. While performance-based cash bonuses focus on achievement of short-term or annual goals, which may encourage the taking of short-term risks at the expense of long-term results, we believe that our internal controls help mitigate this risk and our performance-based cash bonuses are limited, representing a relatively smaller portion of the total compensation opportunities available to most employees. We also believe that our performance-based cash bonuses appropriately balance risk and the desire to focus our employees on specific short-term goals important to our success, and do not encourage unnecessary or excessive risk-taking.

A significant proportion of the compensation provided to our named executive officers and a portion of the compensation provided to our other employees is in the form of long-term equity-based incentives that are important to help further align our employees' interests with those of our stockholders. We do not believe that these equity-based incentives encourage unnecessary or excessive risk taking because their ultimate value is tied to our stock price.

Non-Employee Director Compensation

Current Director Compensation Plan

Our current director compensation plan, as amended to date, applies only to non-employee directors who are not representatives of institutional investors in our company. Our directors who are employees are compensated for their service as employees and do not receive any additional compensation for their director service. Our directors who are representatives of our institutional investors are compensated only for their travel and other expenses in connection with attending meetings of the board or its committees.

Under the director compensation plan as currently in effect, each eligible director receives an annual cash retainer of $20,000, plus, in the case of the chairman of the board, an additional $10,000 annually. The annual retainer is payable in quarterly installments immediately preceding each calendar quarter. In addition, eligible directors receive an option to purchase 19,400 shares of our common stock upon initial election or appointment to the board of directors and an additional option to purchase 9,700 shares of our common stock, or 14,550 shares in the case of the chairman of the board, annually thereafter. Options granted upon initial appointment and in connection with annual grants to continuing directors have an exercise price per share equal to the fair market value of our common stock as of the date of grant. Subject to the director' s continued service, the initial option grants vest in two equal annual installments following the date of grant, while subsequent annual option grants vest in equal monthly installments over 12 months from the date of grant.

In addition to their director grants, the chairmen of the audit and compensation committees are eligible to receive an option to purchase 1,697 shares of our common stock upon initial election or appointment to the chairmanship and an additional option to purchase 1,697 shares of our common stock annually thereafter. These options have an exercise price per share equal to the fair market value of our common stock as of the date of grant. Subject to the director' s continued service as the chairman of the respective committee, each committee chairman option grant vests in equal monthly installments over 12 months from the date of grant. Upon an occurrence of a change of control of our company, as defined in the director compensation plan, all options granted and outstanding would become fully vested and exercisable.

Other than the annual retainers and option grants described above, directors are not currently entitled to receive any cash fees in connection with their service on our board of directors, except for reimbursement of direct expenses incurred in connection with attending meetings of the board or committees thereof.

Post-IPO Director Compensation Policy

In anticipation of this offering and the increased responsibilities of our directors as directors of a public company, we adopted a new director compensation policy in May 2012 that will go into effect upon the completion of this offering. Under this policy, each non-employee director will receive an annual retainer of $35,000 for serving on the board. The chairman of the board will receive an additional annual retainer of $10,000, the chairman of each of the audit and compensation committees will receive an additional annual retainer of $7,500 and the chairman of the nominating and governance committee will receive an additional annual retainer of $3,750. Cash retainers will be paid quarterly at the beginning of each calendar quarter.

In addition to cash fees, each non-employee director will receive an annual equity award having a value, as of the date of grant, equal to $30,000, and the chairman of the board will receive an additional annual equity award having a value of $13,000 as of the date of grant. If a non-employee director joins our board other than at an annual meeting of our stockholders, the annual equity award would be reduced on a pro rata basis for each month prior to the date of grant that has passed since the last annual meeting. Annual equity awards will vest in four equal quarterly installments over the one-year period after the date of grant, subject to the director' s continuous service through each vesting date.

In addition to annual equity awards, any non-employee director who joins our board after the completion of this offering will receive an initial equity award upon his or her election or appointment with a value equal to $55,000 as of the date of grant. Initial equity awards will vest in two equal installments on the first and second anniversaries of the date of grant.

Each annual equity award and initial equity award will have a maximum term of ten years and will be granted so that 75% of the value attributable to the award will be made in the form of nonstatutory stock options and 25% of the value will be made in the form of restricted stock units. For any non-employee director serving at the time of a change in control of our company, all then-outstanding and unvested compensatory equity awards granted under the non-employee director compensation policy would become fully vested and exercisable, if applicable, immediately prior to the change in control.

For stock options granted under the policy, upon the termination of a non-employee director' s continuous service for any reason other than cause, the director will have a post-termination exercise period equal to the ordinary term of the stock option, subject to earlier termination in connection with a corporate transaction or a distribution or liquidation event, as described in our 2012 equity incentive plan.

2012 Director Compensation Table

The following table sets forth information regarding the compensation earned for service on our board of directors during the year ended December 31, 2012 by our directors who were not also our employees. Richard Brajer, our President and Chief Executive Officer, is also a director but does not receive any additional compensation for his services as a director. Mr. Brajer' s compensation as an executive officer is set forth below under "Executive Compensation−Summary Compensation Table."

Name	Fees Earned or Paid in Cash ($)	Option Awards ($) (1)(2)	Total ($)
Buzz Benson	–	–	–
Charles A. Sanders, M.D.	20,000	45,008	65,008
Robert J. Greczyn, Jr.	20,000	59,652	79,652
Christopher W. Kersey, M.D.	–	–	–
John H. Landon	20,000	51,313	71,313
Daniel J. Levangie	20,000	51,313	71,313
Woodrow A. Myers, Jr., M.D.	20,000	50,828	70,828
Roderick A. Young	–	–	–

(1) This column reflects the full grant date fair value for options granted during the year that we will record under ASC 718 as stock-based compensation in our financial statements. Unlike the calculations contained in our financial statements, this calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the director will perform the requisite service for the award to vest in full. The assumptions we used in valuing options are described in note 11 to our financial statements included in this prospectus.

(2) The table below shows the aggregate number of option awards outstanding for each of our non-employee directors as of December 31, 2012:

Name	Aggregate Option Awards Outstanding (#)
Charles A. Sanders, M.D.	169,627
Robert J. Greczyn, Jr.	30,797
John H. Landon	72,991
Daniel J. Levangie	38,800
Woodrow A. Myers, Jr., M.D.	29,100

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table summarizes information regarding the compensation awarded to, earned by or paid to our Chief Executive Officer, our Chief Financial Officer and our three other most highly compensated executive officers during 2012. We refer to these individuals in this prospectus as our named executive officers.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($) (1)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($) (2)	Total ($)
Richard O. Brajer,	2012	444,000	–	–	(4)	13,361	457,361(4)
President and Chief	2011	431,000	–	–	144,385	10,413	585,798
Executive Officer (3)	2010	408,000	10,200 (5)	187,635	67,320	10,063	683,218
Lucy G. Martindale,	2012	295,000	–	–	(4)	5,023	300,023(4)
Executive Vice	2011	284,000	–	24,125	81,919	4,210	394,254
President and Chief Financial Officer	2010	277,000	–	–	45,076	3,620	325,696
Timothy J. Fischer,	2012	318,000	–	541,816	(4)	3,562	863,378(4)
Chief Operating	2011	266,500	–	33,986	90,610	2,438	393,534
Officer (6)	2010	83,000	65,000 (7)	76,180	–	563	224,743
Thomas S. Clement,	2012	288,000	–	90,792	(4)	150,010	528,802(4)
Vice	2011	246,090	60,000 (9)	175,269	85,708	4,169	571,236
President–Regulatory and Quality Affairs (8)							
Robert M. Honigberg,	2012	281,000	–	45,008	(4)	–	326,008(4)
Vice President–	2011	68,750	12,000 (11)	127,791	22,619	–	231,160
Medical Affairs and Chief Medical Officer (10)							

(1) This column reflects the full grant date fair value for options granted during the indicated year that we will record under ASC 718 as stock-based compensation in our financial statements. Unlike the calculations contained in our financial statements, this calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the executive will perform the requisite service for the award to vest in full. The assumptions we used in valuing options are described in note 11 to our financial statements included in this prospectus.

(2) Amounts shown in this column represent employer 401(k) plan matching contributions. In the case of Mr. Brajer, the amount also includes $5,393 in 2012, $6,215 in 2011 and $5,865 in 2010 for life insurance and disability insurance premiums paid by us on Mr. Brajer' s behalf. In the case of Mr. Clement, the amount for 2012 also includes $97,935 of relocation assistance and $47,047 in tax gross-up payments paid pursuant to his employment offer letter.

(3) Mr. Brajer is also a member of our board of directors but does not receive any additional compensation in his capacity as a director.

(4) As of the date of this prospectus, the compensation committee has not yet determined the officer' s achievement of specified performance objectives and overall performance under our 2012 incentive bonus plan. Accordingly, awards under this plan are not yet calculable.

(5) Represents the amount above the specified level of achievement under the incentive bonus plan for our senior leadership team. The compensation committee exercised its discretion to award Mr. Brajer additional compensation in light of his role in the achievement of certain milestones outside of the stated corporate objectives.

(6) Mr. Fischer became an executive officer on September 7, 2010.
(7) Represents a discretionary bonus paid to Mr. Fischer under the terms of his employment offer letter.
(8) Mr. Clement became an executive officer on February 7, 2011.
(9) Represents a signing bonus paid to Mr. Clement in connection with the commencement of his employment.
(10) Mr. Honigberg became an executive officer on October 3, 2011.
(11) Represents a signing bonus paid to Mr. Honigberg in connection with the commencement of his employment.

Grants of Plan-Based Awards During 2012

The following table provides information with regard to potential cash bonuses payable on account of 2012 performance under our performance-based, non-equity incentive plan, and with regard to each stock option award granted to each named executive officer under our equity incentive plans during 2012.

		Estimated Possible Payouts Under Non-Equity Incentive Plan Awards			All Other Option Awards: Number of Securities Underlying	Exercise or Base Price of Option Awards	Grant Date Fair Value of Option Awards
Name	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Options	$/sh	($)(1)
Richard O. Brajer	–	22,200	222,000	296,925			
Lucy G. Martindale	–	10,620	106,200	142,043			
Timothy J. Fischer	–	12,720	127,200	170,130			
	5/18/12				80,025	11.45	424,933
	8/2/12				25,802	11.45	116,883
Thomas S. Clement	–	10,368	103,680	138,672			
	8/7/12				19,400	11.12	90,792
Robert M. Honigberg	–	10,116	101,160	135,302			
	8/2/12				9,700	11.45	45,008

(1) This column reflects the full grant date fair value for options granted during the year that we will record under ASC 718 as stock-based compensation in our financial statements. Unlike the calculations contained in our financial statements, this calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the executive will perform the requisite service for the award to vest in full. The assumptions we used in valuing options are described in note 11 to our financial statements included in this prospectus.

Outstanding Equity Awards at End of 2012

The following table provides information about outstanding stock options held by each of our named executive officers at December 31, 2012. All of these options were granted under our 2007 stock incentive plan. Our named executive officers did not hold any restricted stock or other stock awards at the end of 2012.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Richard O. Brajer				7/15/
	46,438	–	2.50	2013
				2/15/
	5,105	–	3.88	2017
				2/15/
	72,494	–	3.88	2017
				2/15/
	85,437	–	3.88	2017
				4/29/
	13,245	–	2.46	2018
				2/6/
	875	–	2.50	2019
				2/6/
	40,082	–	2.50	2019
				1/15/
	17,765	–	5.63	2020
				1/15/
	54,984	–	5.63	2020
Lucy G. Martindale				2/4/
	8,730	–	2.50	2014
				2/4/
	7,275	–	2.50	2014
				5/5/
	2,000	–	2.50	2015
				2/15/
	3	–	3.88	2017
				2/15/
	23,227	–	3.88	2017
				4/29/
	7,541	–	2.46	2018
				2/6/
	22,940	–	2.50	2019
				4/8/
	7,275	–	6.89	2021
Thomas S. Clement				4/8/
	16,671	19,703 (1)	6.89	2021

	4,445	5,254	(2)	9.84	8/1/2021
	8,891	10,508	(3)	11.12	8/7/2022
Timothy J. Fischer					
	16,368	12,731	(4)	5.63	10/8/2020
	5,456	4,243	(5)	6.89	4/8/2021
	45,012	35,012	(6)	11.45	5/18/2022
	14,513	11,288	(7)	11.45	8/2/2022
Robert M. Honigberg					
	8,487	20,612	(8)	9.02	11/18/2021
	2,829	6,870	(9)	11.45	8/2/2022

(1) This option was granted on April 8, 2011 with a vesting commencement date of February 7, 2011. The unvested portion will vest in 26 equal monthly installments through February 28, 2015.

(2) This option was granted on August 1, 2011 with a vesting commencement date of February 7, 2011. The unvested portion will vest in 26 equal monthly installments through February 28, 2015.

(3) This option was granted on August 7, 2012 with a vesting commencement date of February 7, 2011. The unvested portion will vest in 26 equal monthly installments through February 28, 2015.

(4) This option was granted on October 8, 2010 with a vesting commencement date of September 7, 2010. The unvested portion will vest in 21 equal monthly installments through September 30, 2014.

(5) This option was granted on April 8, 2011 with a vesting commencement date of September 7, 2010. The unvested portion will vest in 21 equal monthly installments through September 30, 2014.

(6) This option was granted on May 18, 2012 with a vesting commencement date of September 7, 2010. The unvested portion will vest in 21 equal monthly installments through September 30, 2014.

(7) This option was granted on May 18, 2012 with a vesting commencement date of September 7, 2010. The unvested portion will vest in 21 equal monthly installments through September 30, 2014.

(8) This option was granted on November 18, 2011 with a vesting commencement date of October 3, 2011. The unvested portion will vest in 34 equal monthly installments through October 31, 2015.

(9) This option was granted on August 2, 2012 with a vesting commencement date of October 3, 2011. The unvested portion will vest in 34 equal monthly installments through October 31, 2015.

StockOption Exercises During 2012

The following table shows information regarding options that were exercised by our named executive officers during the year ended December 31, 2012. Our named executive officers did not have any stock awards that vested in 2012.

	Option Awards	
Name	Number of Shares Acquired on Exercise (#) (1)	Value Realized on Exercise ($) (2)
Richard O. Brajer	233,648	2,408,750
Lucy G. Martindale	43,650	450,000

(1) In December 2012, our board of directors approved the net exercise of some of the stock options held by Mr. Brajer and Ms. Martindale that were scheduled to expire during 2013. Mr. Brajer net exercised options originally exercisable for an aggregate of 233,648 shares with an exercise price of $2.50 per share. Upon the net exercise, we withheld 118,701 shares in satisfaction of the exercise price and required tax withholding obligations, and we issued to Mr. Brajer the remaining 114,947 shares. Ms. Martindale net exercised options originally exercisable for 43,650 shares with an exercise price of $2.50 per share. Upon the net exercise, we withheld 19,910 shares in satisfaction of the exercise price and required tax withholding obligations, and we issued to Ms. Martindale the remaining 23,740 shares.

(2) The aggregate dollar amount realized upon the exercise of the option represents the amount by which the aggregate assumed fair value of the shares of our common stock on the date of exercise, as calculated using a per-share value of $12.81, exceeds the aggregate exercise price of the option, as calculated using a per-share exercise price of $2.50.

Pension Benefits

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during 2012.

Nonqualified Deferred Compensation

Our named executive officers did not earn any nonqualified deferred compensation benefits from us during 2012.

Employment Agreements

Our compensation committee has approved amended and restated employment agreements with each of our named executive officers, which we expect to take effect prior to the completion of this offering. These employment agreements have no specific term and constitute at-will employment. Each agreement provides the named executive officer' s base salary, target bonus percentage and eligibility to participate in our standard benefit plans and our Executive Severance Benefit Plan described below.

Richard O. Brajer

Mr. Brajer' s current annual base salary is $472,000 and his annual target bonus opportunity is 55% of his base salary. Mr. Brajer is eligible to participate in employee benefit plans established by us. In addition, Mr. Brajer is eligible to participate in our severance benefit plan, described below, at the level of benefits provided to our Chief Executive Officer. Nothing in the employment agreement modifies the vesting or other terms of Mr. Brajer' s existing equity awards.

Lucy G. Martindale

Ms. Martindale' s current annual base salary is $318,000 and her annual target bonus opportunity is 40% of her base salary. Ms. Martindale is eligible to participate in employee benefit plans established by us. In addition, Ms. Martindale is eligible to participate in our severance benefit plan, described below, at the level of benefits provided to our Executive Officers. Nothing in the employment agreement modifies the vesting or other terms of Ms. Martindale' s existing equity awards.

Thomas S. Clement

Mr. Clement' s current annual base salary is $288,000 and his annual target bonus opportunity is 36% of his base salary. Mr. Clement is eligible to participate in employee benefit plans established by us. In addition, Mr. Clement is eligible to participate in our severance benefit plan, described below, at the level of benefits provided to our Vice Presidents. Nothing in the employment agreement modifies the vesting or other terms of Mr. Clement' s existing equity awards.

Timothy J. Fischer

Mr. Fischer' s current annual base salary is $359,000 and his annual target bonus opportunity is 45% of his base salary. Mr. Fischer is eligible to participate in employee benefit plans established by us. In addition, Mr. Fischer is eligible to participate in our severance benefit plan, described below, at the level of benefits provided to our Executive Officers. Nothing in the employment agreement modifies the vesting or other terms of Mr. Fischer' s existing equity awards.

Robert M. Honigberg

Mr. Honigberg' s current annual base salary is $289,500 and his annual target bonus opportunity is 36% of his base salary. Mr. Honigberg is eligible to participate in employee benefit plans established by us. In addition, Mr. Honigberg is eligible to participate in our severance benefit plan, described below, at the level of benefits provided to our Vice Presidents. Nothing in the employment agreement modifies the vesting or other terms of Mr. Honigberg' s existing equity awards.

Potential Payments upon Termination of Employment and in Connection with Change of Control Arrangements

We believe that reasonable severance benefits for our named executive officers are important because it may be difficult for them to find comparable employment within a short period of time. We also believe that it is important to protect our named executive officers in the event of a change of control transaction involving our company, as a result of which such officers might have their employment terminated. In addition, we believe that the interests of management should be aligned with those of our stockholders as much as possible, and we believe that providing protection upon a change of control is an appropriate counter to any disincentive such officers might otherwise perceive in regard to transactions that may be in the best interest of our stockholders. As a result of these considerations by our compensation committee, we have adopted an Executive Severance Benefit Plan and a Retention Bonus Plan. These plans, described below, provide for benefits to be paid if the executives are terminated under specified conditions or in connection with a change in control of our company.

Executive Severance Benefit Plan

Our board of directors approved an Executive Severance Benefit Plan, or the severance benefit plan, in May 2012. Each of our executives at the level of vice president or above who is an officer as defined under Section 16 of the Securities Exchange Act of 1934, as amended, and who has received and returned a signed participation notice, including each of our named executive officers, is eligible to participate in the severance benefit plan.

Any eligible participant who experiences an involuntary termination without cause at any time or resigns for good reason, in each case as defined in the severance benefit plan, upon or within 12 months following a change in control will receive continued payments of his or her base salary during the applicable severance period, plus company-paid health insurance coverage for the length of the applicable severance period. The applicable severance period is determined as follows:

For the Chief Executive Officer, the severance period is 15 months for an involuntary termination without cause other than upon or within 12 months following a change in control, and 24 months for an involuntary termination without cause or a resignation for good reason, in either case upon or within 12 months following a change in control.

For the Chief Financial Officer, Chief Operating Officer, Chief Scientific Officer or General Counsel, who are collectively referred to as the Executive Officers under the severance benefit plan, the severance period is 12 months for an involuntary termination without cause other than upon or within 12 months following a change in control, and 15 months for an involuntary termination without cause or a resignation for good reason, in either case upon or within 12 months following a change in control.

For all other participants, who are collectively referred to as the Vice Presidents under the severance benefit plan, the severance period is nine months for an involuntary termination without cause other than upon or within 12 months following a change in control, and 15 months for an involuntary termination without cause or a resignation for good reason, in either case upon or within 12 months following a change in control.

In addition, if a participant remains employed by us or any successor entity for six months after the closing of a change in control, he or she will become fully vested in any then-outstanding equity awards on that date. If a participant is terminated without cause or resigns for good reason upon or within six months following a change in control, he or she will become fully vested in any then-outstanding equity awards on the date of the participant' s separation from service.

To be eligible to receive any benefits under the severance benefit plan that are triggered by a participant' s termination, a participant must executive a general waiver and release. The payments and benefits under the severance benefit plan are subject to a "best-after-tax" provision in the case that any payment or benefit a participant would receive from us or otherwise would trigger excise tax penalties and loss of deductibility under Sections 280G and 4999 of the Code. If a participant is entitled to receive other severance benefits or payments in another agreement with us, other than the Retention Bonus Plan described below, he or she will not receive duplicate benefits.

If the employment of each of the named executive officers had been terminated without cause as of December 31, 2012 in connection with a change of control, the estimated maximum payments that each would have received under the severance benefit plan, as well as acceleration of stock option vesting under our 2007 stock incentive plan, are set forth in the table below. If the employment of each of the named executive officers had been terminated without cause as of December 31, 2012, but not in connection with a change of control, the estimated maximum payments that each would have received under the severance benefit plan are also set forth in the table below. This table does not reflect amounts payable upon specified changes of control under the Retention Bonus Plan as described below, because such amounts are not determinable at this time.

	Change of Control				No Change of Control		
Name	*Salary*	*Healthcare Benefits*	*Acceleration of Stock Options (1)*	*Total*	*Salary*	*Healthcare Benefits*	*Total*
Richard O. Brajer	$888,000	$41,226	$–	$929,226	$555,000	$25,766	$580,766
Lucy G. Martindale	368,750	9,517	–	378,267	295,000	7,614	302,614
Thomas S. Clement	360,000	17,191	150,005	527,196	216,000	10,315	226,315
Timothy J. Fischer	397,500	25,339	179,495	602,334	318,000	20,271	338,271
Robert M. Honigberg	351,250	25,766	87,463	464,479	210,750	15,460	226,210

(1) Based on the fair market value of our common stock as of September 30, 2012, which was $12.81 per share. If we had calculated the value of the option acceleration based on an assumed fair value of $14.00 per share, which is the midpoint of the range set forth on the cover page of this prospectus, the value of the equity acceleration would have been as follows: $192,208 for Mr. Clement, $254,791 for Mr. Fischer and $120,166 for Mr. Honigberg.

Retention Bonus Plan

In addition to their participation in our severance benefit plan, Mr. Brajer and Ms. Martindale are also participants in our Retention Bonus Plan, as amended to date. This plan is designed to encourage the continued dedication of our key officers and employees in the event of the possibility or occurrence of a significant restructuring or change of control.

The plan provides for retention bonuses to be granted to the plan' s participants in the event of a change of control, as defined in the plan, under the following conditions:

Eligibility. Participants who are employees of the company on the effective date of the change of control or whose employment has been terminated by the company without cause, as defined in the plan, within two months prior to the effective date of the change of control are eligible to receive a retention bonus. Any participant who is terminated for any other reason or more than two months prior to the change of control will not receive a retention bonus.

Amount. Each retention bonus is equal to the amount of the retention bonus pool multiplied by the participant' s participation percentage, subject to tax limitations. The retention bonus pool is equal to (i) 9.07% of the net transaction value if it is less than $57 million, (ii) 11.27% of the net transaction value if it is between $57 million and $126 million or (iii) 13.4% of the net transaction value if it is in excess of $126 million. The board of directors has discretion to increase these percentages up to 1% per year in lieu of payments made under our annual bonus plans. The retention bonus pool may also be adjusted based on the actual availability of funds as a result of the change of control. Each participant' s participation percentage is equal to the participant' s number of participation units divided by the sum of all participation units held by all participants at any applicable time. The number of participation units currently held by our named executive officers is as follows:

	Range of Participation Units		
Participant	*Net Transaction Value < $57 million*	*Net Transaction Value ≥ $57 million but < $126 million*	*Net Transaction Value ≥ $126 million*
Richard O. Brajer	40	48	53
Lucy G. Martindale	3.3 - 7	4 - 8.3	5 - 10
All participants	90.7	112.7	134

Conditions. If a participant has been granted stock options prior to the effective date of the change of control, in order to receive his or her retention bonus, the participant must elect to forego and relinquish any and all rights derived from the outstanding stock options.

Payment Timing and Form. The retention bonus will be paid to each participant in a lump sum within 60 days following the later of the effective date of the change of control or the date upon which the applicable amounts are paid by a third party or, in the case of any contingent payments, when there is no longer a substantial risk of forfeiture with respect thereto. If the gross proceeds received by the company from the change of control are in a form other than cash or unrestricted securities, the board of directors will use its best efforts to convert such proceeds to cash for purposes of paying retention bonuses.

This Retention Bonus Plan will automatically terminate upon the closing of this offering.

Equity Incentive Plans

We believe that our ability to grant equity-based awards is a valuable and necessary compensation tool that aligns the long-term financial interests of our employees and directors with the financial interests of our stockholders. In addition, we believe that our ability to grant options and other equity-based awards helps us to attract, retain and motivate qualified employees, and encourages them to devote their best efforts to our business and financial success. The material terms of our equity incentive plans are described below.

1997 Stock Option Plan

Our board of directors adopted, and our stockholders approved, the 1997 Stock Option Plan, or the 1997 stock option plan, in September 1997. As of December 31, 2012, options to purchase 497,381 shares of common stock at a weighted average exercise price per share of $3.74 were outstanding under the 1997 stock option plan. The 1997 stock option plan expired in 2007 and no shares of common stock are available for issuance under that plan, although all outstanding options remain outstanding in accordance with their terms.

Administration. Our board of directors administers our 1997 stock option plan. Our board of directors has the authority to construe and interpret the terms of the 1997 stock option plan and the options granted under it.

Eligibility. The 1997 stock option plan provided for the grant of incentive stock options within the meaning of Section 422 of the Code and nonstatutory stock options. Our employees, including officers, non-employee directors, advisors and independent consultants were eligible to receive options under the 1997 stock option plan, except that incentive stock options could be granted only to employees.

Corporate Transactions. Unless otherwise determined by the board of directors at the time of grant, in the event of a merger, consolidation, corporate reorganization or any transaction in which all or substantially all of our assets or stock are sold, leased, transferred or otherwise disposed of, any unvested portion of a stock option granted under the 1997 stock option plan will become fully vested, unless the surviving or acquiring corporation assumes or substitutes comparable options for the outstanding options granted under the 1997 stock option plan or replaces the options with a cash incentive program that preserves the intrinsic value of the options at the time of the transaction and provides for subsequent payout over the same vesting schedules as the options being replaced. In addition, if the employment of an optionee who was employed by the company as of the effective time of a corporate transaction is terminated by the company without cause or by the optionee for good reason, in either case within 12 months after the corporate transaction, then, with respect to options that have been assumed or substituted, any unvested portion of a stock option will become fully vested as of the date prior to the date of such optionee' s termination of employment.

2007 Stock Incentive Plan

Our board of directors adopted, and our stockholders approved, the 2007 Stock Incentive Plan, or the 2007 stock incentive plan, in October 2007. The 2007 stock incentive plan was most recently amended by our board of directors and approved by our stockholders in July 2010. After the effectiveness of the 2012 equity incentive plan described below, no additional equity awards will be granted under the 2007 stock incentive plan, but all outstanding awards will continue to be governed by their existing terms.

Types of Awards. The 2007 stock incentive plan provides for the grant of incentive stock options within the meaning of Section 422 of the Code, nonstatutory stock options, restricted stock and restricted stock units, which are referred to together as restricted stock awards, and other forms of equity awards, which are referred to collectively as equity awards. Equity awards may be granted to employees, including officers, directors, and individual consultants and advisors of our company and our affiliates. Only our employees are eligible to receive incentive stock options.

Share Reserve. An aggregate of 1,895,400 shares of common stock are reserved for issuance under the 2007 stock incentive plan. The 2007 stock incentive plan provides for the grant of incentive stock options and nonstatutory stock options. As of December 31, 2012, options to purchase 1,559,467 shares of common stock at a weighted average exercise price per share of $2.79 were outstanding under the 2007 stock incentive plan. As of December 31, 2012, 322,218 shares of common stock remained available for future issuance.

Administration. Our board of directors, or a duly authorized committee thereof, administers our 2007 stock incentive plan. Our board of directors has delegated its authority to administer the 2007 stock incentive plan to our compensation committee. Our board of directors or the authorized committee, referred to as the plan administrator, has the authority to interpret, amend, suspend and terminate the 2007 stock incentive plan, as well as to determine the terms of an equity award or amend the terms of an equity award. No amendment to the 2007 stock incentive plan or any equity award thereunder may materially and adversely affect the rights of a participant under any outstanding equity award.

Stock Options. Each stock option is granted pursuant to a notice of stock option and stock option agreement. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2007 stock incentive plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Shares subject to stock options granted under the 2007 stock incentive plan generally vest in a series of installments over a specified period of service, typically four years.

The plan administrator determines the term of stock options granted under the 2007 equity incentive plan, subject to limitations in the case of some incentive stock options, as described below. In general, if an optionee' s service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause,

the optionee may generally exercise the vested portion of any option for a period of three months following the cessation of service. If an optionee' s service relationship with us, or any of our affiliates, ceases due to disability or death or if an optionee dies within a specified period following cessation of service, the optionee or a beneficiary generally may exercise the vested portion of any option for a period of 12 months following the death or disability. In the event of a termination of an optionee' s services for cause, options generally terminate immediately upon such termination. In no event, however, may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include: (1) cash or check, (2) a broker-assisted cashless exercise, (3) when our common stock is registered under the Exchange Act, the tender of common stock previously owned by the optionee, (4) delivery of a promissory note, (5) payment of other lawful consideration as determined by the plan administrator, or (6) any combination of the above.

Tax Limitations on Incentive Stock Options. Incentive stock options may be granted only to our employees. The maximum term of an incentive stock option is ten years from the date of grant. The aggregate fair market value, determined at the time of grant, of shares of our common stock with respect to incentive stock options that are exercisable for the first time by an optionee during any calendar year under all of our stock plans may not exceed $100,000. No incentive stock option may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and the term of the incentive stock option does not exceed five years from the date of grant.

Restricted Stock Awards. Each restricted stock award is granted pursuant to a summary of restricted stock purchase and restricted stock purchase agreement. An award of restricted stock entitles a participant to purchase shares of our common stock that are subject to specified restrictions, which may include a repurchase right in our favor or a reacquisition right, if the shares are issued at no cost, that lapses in accordance with a vesting schedule or in the event that conditions specified by the plan administrator are met. A restricted stock unit entitles participants to receive shares of our common stock to be delivered at the time of vesting. The plan administrator will determine the terms and conditions of restricted stock awards, including the conditions for repurchase or forfeiture and the purchase price, if any.

Other Equity Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the equity award, the purchase price applicable to the equity award and all other terms and conditions of such equity awards.

Transferability. Equity awards granted under the 2007 stock incentive plan are not transferrable except by will or by the laws of descent or distribution or, other than in the case of an incentive stock option, pursuant to a domestic relations order.

Changes in Control. In the event of specified changes in control of our company, our board of directors may take any one or more actions as to outstanding equity awards, or as to a portion of any outstanding equity award under the 2007 stock incentive plan, including:

- providing that such awards will be assumed, or substantially equivalent awards substituted, by the acquiring or succeeding corporation or an affiliate thereof;
- providing that all unexercised awards will terminate immediately prior to the consummation of such transaction unless exercised within a specified period of time;
- providing that all or any outstanding awards will become vested or exercisable in full or in part or any reacquisition or repurchase rights held by us shall lapse in full or part at or immediately prior to such event; or

in the event of a consolidation, merger, combination, reorganization or similar transaction under the terms of which holders of our common stock will receive a cash payment per share surrendered in the transaction, making or providing for an equivalent cash payment in exchange for the termination of such equity awards.

In the event of a change in control in which the acquiring or succeeding corporation or an affiliate thereof assumes or substitutes for outstanding awards, if a participant' s service is terminated by us without cause or by the participant for good reason, in either case within 12 months after such change in control, then, with respect to equity awards that have been assumed or substituted, the equity awards will become fully vested and exercisable and any reacquisition or repurchase rights held by the acquiring or succeeding corporation or an affiliate thereof will lapse as of the date of termination of service.

2012 Equity Incentive Plan

Our board of directors and stockholders adopted the 2012 Equity Incentive Plan, or the 2012 equity incentive plan, in May 2012. The 2012 equity incentive plan will become effective immediately upon the signing of the underwriting agreement for this offering. The 2012 equity incentive plan will terminate on May 24, 2022, unless sooner terminated by our board of directors.

Types of Awards. The 2012 equity incentive plan provides for the grant of incentive stock options within the meaning of Section 422 of the Code, nonstatutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards and other forms of equity compensation, which are referred to collectively as equity awards. The 2012 equity incentive plan also provides for the grant of performance cash awards. Awards may be granted to employees, including officers, consultants and directors of our company and our affiliates. Only our employees and those of our affiliates are eligible to receive incentive stock options.

Authorized Shares. The maximum number of shares of our common stock that may be issued under our 2012 equity incentive plan is initially 970,000 shares. This number will automatically increase on January 1 of each year, continuing through January 1, 2022, by 3.5% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, or by a lesser number of shares determined by our board of directors.

Maximum Number of Shares Issued through Incentive Stock Options. The maximum number of shares that may be issued pursuant to the exercise of incentive stock options under the 2012 equity incentive plan is 9,700,000 shares of common stock.

Section 162(m) Limits. No participant may be granted equity awards covering more than 727,500 shares of our common stock under the 2012 equity incentive plan during any calendar year pursuant to stock options, stock appreciation rights and other equity awards whose value is determined by reference to an increase over an exercise price or strike price of at least 100% of the fair market value of our common stock on the date of grant. Additionally, no participant may be granted in a calendar year a performance stock award covering more than 727,500 shares of our common stock or a performance cash award having a maximum value in excess of $2,000,000 under the 2012 equity incentive plan. Such limitations are designed to help assure that any deductions to which we would otherwise be entitled with respect to such awards will not be subject to the $1,000,000 limitation on the income tax deductibility of compensation paid per covered executive officer imposed by Section 162(m) of the Code.

Reversion of Shares. If an equity award granted under the 2012 equity incentive plan expires or otherwise terminates without being exercised in full, or is settled in cash, the expiration, termination or settlement will not reduce or otherwise offset the number of shares of our common stock available for issuance under the 2012

equity incentive plan. In addition, the following types of shares may become available for the grant of new equity awards under the 2012 equity incentive plan:

shares that are forfeited to or repurchased by us prior to becoming fully vested;

shares reacquired by us in satisfaction of tax withholding obligations on an equity award; and

shares reacquired by us as consideration for the exercise or purchase price of an equity award.

Shares issued under the 2012 equity incentive plan may be previously unissued shares or reacquired shares bought on the open market. No awards have been granted and no shares of our common stock have been issued under the 2012 equity incentive plan.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2012 equity incentive plan. Our board of directors has delegated its authority to administer the 2012 equity incentive plan to our compensation committee under the terms of the compensation committee' s charter. Our board of directors may also delegate to one or more of our officers the authority to (a) designate employees other than officers to receive equity awards, and (b) determine the number of shares of our common stock to be subject to such equity awards. Subject to the terms of the 2012 equity incentive plan, our board of directors or an authorized committee, referred to as the plan administrator, determines recipients, dates of grant, the numbers and types of awards to be granted, and the terms and conditions of the awards, including the period of their exercisability and vesting. Subject to the limitations set forth below, the plan administrator will also determine the exercise price of options, the consideration to be paid for restricted stock awards, the strike price of stock appreciation rights and the types of consideration to be paid for equity awards.

The plan administrator has the authority to reprice any outstanding option or stock appreciation right, cancel and re-grant any outstanding option or stock appreciation right in exchange for new equity awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. Incentive and nonstatutory stock options are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2012 equity incentive plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2012 equity incentive plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2012 equity incentive plan, up to a maximum of ten years, except in the case of some incentive stock options, as described below. Unless the terms of an optionee' s stock option agreement provide otherwise, if an optionee' s service relationship with us, or any of our affiliates, ceases for any reason other than disability, death, cause or at any time after the optionee' s retirement, the optionee may generally exercise the vested portion of any option for a period of three months following the cessation of service. Under our director compensation policy that will become effective upon the completion of this offering, non-employee directors will be entitled to exercise the vested portion of any option during the ordinary term of the option. The option term may be extended following such a termination in the event that exercise of the option is prohibited by applicable securities laws or the sale of our common stock received upon exercise is prohibited by our insider trading policy. If an optionee' s service relationship with us, or any of our affiliates, ceases due to disability or death or an optionee dies within a specified period following cessation of service, the optionee or a beneficiary generally may exercise the vested portion of any option for a period of 12 months in the event of disability and 18 months in the event of death. If an optionee' s service relationship with us terminates for any reason, excluding a termination for cause, at any time after the participant' s retirement date, the optionee generally may exercise the vested portion of any option for a period of 18 months following termination. In the event of a termination of an optionee' s services for cause, options generally terminate immediately upon the occurrence of the event giving rise to our right to terminate the optionee for cause. In no event, however, may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include cash or check, a broker-assisted cashless exercise, the tender of common stock previously owned by the optionee, a net exercise of the option if the option is a nonstatutory stock option, and other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order or official marital settlement agreement. An optionee may designate a beneficiary, however, who may exercise the option following the optionee' s death.

Tax Limitations on Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of shares of our common stock with respect to incentive stock options that are exercisable for the first time by an optionee during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit or otherwise do not comply with the rules governing incentive stock options will generally be treated as nonstatutory stock options. No incentive stock option may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and the term of the incentive stock option does not exceed five years from the date of grant.

Restricted Stock Awards. Restricted stock awards are granted pursuant to restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for cash or check, past or future services rendered to us or our affiliates, or any other form of legal consideration. Shares of common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule to be determined by the plan administrator.

Restricted Stock Unit Awards. A restricted stock unit is a promise by us to issue shares of our common stock, or to pay cash equal to the value of shares of our common stock, equivalent to the number of units covered by the award at the time of vesting of the units or thereafter. Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the plan administrator. Restricted stock units granted under the 2012 equity incentive plan vest at the rate specified in the restricted stock unit award agreement as determined by the plan administrator. The plan administrator will determine the consideration to be paid, if any, by the participant upon delivery for each share issued with respect to a restricted stock unit award, which may be paid in any form of legal consideration acceptable to the plan administrator. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect to shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant' s cessation of continuous service for any reason.

Stock Appreciation Rights. A stock appreciation right entitles the participant to a payment equal in value to the appreciation in the value of the underlying shares of our common stock for a predetermined number of shares over a specified period of time. Stock appreciation rights are granted pursuant to stock appreciation rights agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount equal to the product of (a) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (b) the number of shares of common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2012 equity incentive plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2012 equity incentive plan, up to a maximum of ten years. Unless the terms of a participant' s stock appreciation right

agreement provides otherwise, if a participant' s service relationship with us, or any of our affiliates, ceases for any reason other than disability, death, cause or at any time after the optionee' s retirement, the participant may generally exercise the vested portion of any stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term may be extended following such a termination in the event that exercise of the stock appreciation right is prohibited by applicable securities laws or the sale of our common stock received upon exercise is prohibited by our insider trading policy. If a participant' s service relationship with us, or any of our affiliates, ceases due to disability or death or a participant dies within a specified period following cessation of service, the participant or a beneficiary generally may exercise the vested portion of any stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. If a participant' s service relationship with us terminates for any reason, excluding a termination for cause, at any time after the participant' s retirement date, the participant generally may exercise the vested portion of any stock appreciation right for a period of 18 months following termination. In the event of a termination of a participant' s services for cause, stock appreciation rights generally terminate immediately upon the event giving rise to our right to terminate the participant for cause. In no event, however, may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. The 2012 equity incentive plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the $1,000,000 limitation on the income tax deductibility of compensation paid per covered executive officer imposed by Section 162(m) of the Code. To help assure that the compensation attributable to performance-based awards will so qualify, our compensation committee can structure such awards so that the stock or cash will be issued or paid pursuant to such award only following the achievement of certain pre-established performance goals during a designated performance period.

Our compensation committee may establish performance goals by selecting from one or more of the following performance criteria: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) earnings before interest, taxes, depreciation, amortization and legal settlements; (5) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (6) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (8) total stockholder return; (9) return on equity or average stockholder' s equity; (10) return on assets, investment, or capital employed; (11) stock price; (12) margin (including gross margin); (13) income (before or after taxes); (14) operating income; (15) operating income after taxes; (16) pre-tax profit; (17) operating cash flow; (18) sales or revenue targets; (19) increases in revenue or product revenue; (20) expenses and cost reduction goals; (21) improvement in or attainment of working capital levels; (22) economic value added (or an equivalent metric); (23) market share; (24) cash flow; (25) cash flow per share; (26) share price performance; (27) debt reduction; (28) implementation or completion of projects or processes; (29) stockholders' equity; (30) capital expenditures; (31) debt levels; (32) operating profit or net operating profit; (33) workforce diversity; (34) growth of net income or operating income; (35) billings; (36) bookings; (37) employee retention; (38) commercial introduction or launch of new in vitro diagnostic technology platforms; (39) placement, lease, license or sale of the Vantera or other new technology platforms; (40) launch of new product assays or *in vitro* diagnostic tests; (41) execution of strategic partnership or collaboration agreements; (42) execution of strategic licensing agreements; (43) U.S. Food and Drug Administration clearance of product, assay or new technology applications; (44) the granting or filing of new intellectual property applications, including but not limited to patents and trademarks; (45) an increase in the number of "covered lives" by managed care or other payor groups; (46) improved operational process efficiencies; (47) operational process cost reductions; (48) Six Sigma project achievements; (49) satisfactory regulatory audits and inspection outcomes; (50) efficient deployment of resources (including but not limited to cash); (51) measures of employee engagement; (52) measures of third party customer satisfaction; and (53) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by our board of directors or our compensation committee.

Our compensation committee may establish performance goals on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless otherwise specified in the award agreement at the time the award is granted or in such other document setting forth the performance goals at the time the goals are established, our compensation committee will appropriately make adjustments in the method of calculating the attainment of the performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any "extraordinary items" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles and (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item. In addition, our compensation committee retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

Other Equity Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the award and all other terms and conditions of such awards.

Adjustment Provisions. Transactions not involving our receipt of consideration, such as mergers, consolidations, reorganizations, stock dividends, or stock splits, may change the type, class and number of shares of our common stock subject to the 2012 equity incentive plan and outstanding equity awards. In that event, the 2012 equity incentive plan will be appropriately adjusted as to the type, class and the maximum number of shares of our common stock subject to the 2012 equity incentive plan, and outstanding equity awards will be adjusted as to the type, class, number of shares and price per share of common stock subject to such equity awards.

Corporate Transactions. In the event of specified significant corporate transactions, including a consolidation, merger or similar transaction involving our company or the sale, lease or other disposition of all or substantially all of our assets, or a sale or disposition of at least 50% of the outstanding capital stock of our company, then our board of directors, or the board of directors of any corporation assuming our obligations, may take any one or more actions as to outstanding equity awards, or as to a portion of any outstanding equity award under the 2012 equity incentive plan, including:

arrange for the assumption, continuation or substitution of an equity award by the surviving or acquiring entity or parent company;

arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;

accelerate the vesting, in whole or in part, of the equity award and provide for its termination prior to the effective time of the corporate transaction;

arrange for the lapse, in whole or in part, of any reacquisition or repurchase right held by us;

cancel or arrange for the cancellation of the equity award in exchange for such cash consideration, if any, as our board of directors may deem appropriate; or

make a payment equal to the excess of (1) the value of the property the participant would have received upon exercise of the equity award over (2) the exercise price otherwise payable in connection with the equity award.

Change in Control. In the event of a change in control of our company in which the acquiring or succeeding corporation or an affiliate thereof assumes or substitutes for outstanding awards, if a participant' s service is terminated without cause other than for death or disability or by the participant for good reason, in either case within 12 months after such change in control, then, with respect to equity awards that have been assumed or substituted, the equity awards will become fully vested and exercisable and any reacquisition or repurchase rights held by the acquiring or succeeding corporation or an affiliate thereof will lapse as of the date of termination of service.

2012 Employee Stock Purchase Plan

Our board and stockholders approved our 2012 Employee Stock Purchase Plan, or our 2012 ESPP, in May 2012. We do not expect to grant purchase rights under our 2012 ESPP until after the closing of this offering.

The maximum number of shares of our common stock that may be issued under our 2012 ESPP is 242,500 shares. Additionally, the number of shares of our common stock reserved for issuance under our 2012 ESPP will automatically increase on January 1 of each year, beginning on January 1 of the year after the closing of this offering and ending on and including January 1, 2022, by the lesser of (i) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, (ii) 436,500 shares of our common stock, or (iii) such lesser number of shares of common stock as determined by our board of directors. Shares subject to purchase rights granted under our 2012 ESPP that terminate without having been exercised in full will not reduce the number of shares available for issuance under our 2012 ESPP.

Our board of directors, or a duly authorized committee thereof, will administer our 2012 ESPP. Our board of directors has delegated its authority to administer our 2012 ESPP to our compensation committee under the terms of the compensation committee' s charter.

Employees, including executive officers, of ours or any of our designated affiliates may have to satisfy one or more of the following service requirements before participating in our 2012 ESPP, as determined by the administrator: (i) customary employment with us or one of our affiliates for more than 20 hours per week and more than five months per calendar year, or (ii) continuous employment with us or one of our affiliates for a minimum period of time, not to exceed two years, prior to the first date of an offering. An employee may not be granted rights to purchase stock under our 2012 ESPP if such employee (i) immediately after the grant would own stock possessing 5% or more of the total combined voting power or value of all classes of our common stock, or (ii) holds rights to purchase stock under our 2012 ESPP that would accrue at a rate that exceeds $25,000 worth of our stock for each calendar year that the rights remain outstanding.

A component of our 2012 ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Code and the provisions of this component will be construed in a manner that is consistent with the requirements of Section 423 of the Code. In addition, the 2012 ESPP authorizes the grant of options to purchase shares of our common stock that do not meet the requirements of Section 423 of the Code because of deviations necessary to permit participation in the ESPP by employees who are foreign nationals or employed outside of the United States while complying with applicable foreign laws. Any such options must be granted pursuant to rules, procedures or subplans adopted by our board designed to achieve these objectives for eligible employees and our company. The administrator may specify offerings with a duration of not more than 27 months, and may specify one or more shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for the employees who are participating in the offering. The administrator, in its discretion, will determine the terms of offerings under our 2012 ESPP.

Our 2012 ESPP permits participants to purchase shares of our common stock through payroll deductions up to 15% of their earnings. Unless otherwise determined by the administrator, the purchase price of the shares will be 85% of the lower of the fair market value of our common stock on the first day of an offering or on the date of purchase. Participants may end their participation at any time during an offering and will be paid their accrued contributions that have not yet been used to purchase shares. Participation ends automatically upon termination of employment with us.

A participant may not transfer purchase rights under our 2012 ESPP other than by will, the laws of descent and distribution or as otherwise provided under our 2012 ESPP.

In the event of a specified corporate transaction, such as a merger or change in control of our company, a successor corporation may assume, continue or substitute each outstanding purchase right. If the successor corporation does not assume, continue or substitute for the outstanding purchase rights, the offering in progress will be shortened and a new exercise date will be set. The participants' purchase rights will be exercised on the new exercise date and such purchase rights will terminate immediately thereafter.

Our board of directors has the authority to amend, suspend or terminate our 2012 ESPP, at any time and for any reason. Our 2012 ESPP will remain in effect until terminated by our board of directors in accordance with the terms of the 2012 ESPP.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees are able to defer eligible compensation subject to applicable annual Code limits. We currently make matching contributions in an amount equal to 50% of the first 6% contributed by a participant. Pre-tax and matching contributions are allocated to each participant' s individual account and are then invested in selected investment alternatives according to the participant' s directions. Contributions that we make are subject to a vesting schedule; employees are immediately and fully vested in their contributions. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan and all contributions are deductible by us when made.

Limitations on Liability and Indemnification Matters

Upon completion of this offering, our amended and restated certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director' s duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

This limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation and our amended and restated bylaws will provide that we are required to indemnify our directors to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also provide that, upon satisfaction of specified conditions, we are required to advance expenses incurred by a director in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. Our amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. Insofar as indemnification for liabilities arising under the Securities Act may be permitted for our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised 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. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder' s investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought and we are not aware of any threatened litigation that may result in claims for indemnification.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to 180 days after the date of this offering, subject to potential extension or early termination, the sale of any shares under such plan would be subject to the lock-up agreement that the director or officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of transactions since January 1, 2010 in which we have participated in which the amount involved exceeded or will exceed $120,000, and in which any of our directors, executive officers or holders of more than five percent of our capital stock or any members of their immediate family had or will have a direct or indirect material interest, other than compensation arrangements which are described under "Management – Executive Compensation" and "Management – Non-Employee Director Compensation."

Participation in Offering

Some of the holders of more than five percent of our capital stock have indicated an interest in purchasing up to an aggregate of $3.4 million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing stockholders and any of these existing stockholders could determine to purchase more, less or no shares in this offering. Any shares purchased by these stockholders will be subject to the lock-up agreements described in the "Underwriting" section of this prospectus.

Agreements with Agilent Technologies Inc.

We currently purchase the magnet, probe and console incorporated in our *Vantera* system from Agilent Technologies, and in July 2012 we entered into a supply agreement with Agilent pursuant to which we have agreed to exclusively purchase those components from them. Agilent holds over five percent of our outstanding common stock, determined on an as-converted to common stock basis. During the years ended December 31, 2010, 2011 and 2012, we made aggregate payments to Agilent under this purchase arrangement of $0.7 million, $1.6 million and $2.4 million, respectively.

Related Person Transaction Policy

Prior to this offering, we have not had a formal policy regarding approval of transactions with related parties. In connection with this offering, we have adopted a related person transaction policy that sets forth our procedures for the identification, review, consideration and approval or ratification of related person transactions. The policy will become effective immediately upon the execution of the underwriting agreement for this offering. For purposes of our policy only, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were or will be participants in which the amount involves exceeds $120,000. Transactions involving compensation for services provided to us as an employee or director are not covered by this policy. A related person is any executive officer, director or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our board of directors, for review, consideration and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related-person transactions and to effectuate the terms of the policy. In addition, under our Code of Conduct, our employees and directors have an affirmative responsibility to

disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest. In considering related person transactions, our audit committee, or other independent body of our board of directors, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director' s independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy requires that, in determining whether to approve, ratify or reject a related person transaction, our audit committee, or other independent body of our board of directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our audit committee, or other independent body of our board of directors, determines in the good faith exercise of its discretion.

All of the transactions described above were entered into prior to the adoption of the written policy, but all were approved by our board of directors considering similar factors to those described above.

PRINCIPAL STOCKHOLDERS

The following table sets forth the beneficial ownership of our common stock as of December 31, 2012 by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

The percentage ownership information shown in the table is based upon 8,888,795 shares of common stock outstanding as of December 31, 2012, after giving effect to the conversion of all of our convertible preferred stock into 6,994,517 shares of common stock, which will occur automatically upon the closing of this offering.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before March 1, 2013, which is 60 days after December 31, 2012. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Some of the holders of more than 5% of our common stock and their affiliated entities have indicated an interest in purchasing shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing stockholders and any of these existing stockholders could determine to purchase more, less or no shares in this offering. The following table does not reflect any such potential purchases by these existing principal stockholders or their affiliated entities. However, if any shares are purchased by these stockholders, the number of shares of common stock beneficially owned after this offering and the percentage of common stock beneficially owned after this offering will differ from that set forth in the table below.

Except as otherwise noted below, the address for persons listed in the table is c/o LipoScience, Inc., 2500 Sumner Boulevard, Raleigh, North Carolina 27616.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned Before Offering	Percentage of Shares Beneficially Owned After Offering
5% Stockholders:			
Entities affiliated with Three Arch Capital (1)	1,640,086	18.5 %	11.8 %
Entities affiliated with SightLine Partners (2)	804,210	9.0	5.8
James D. Otvos (3)	755,053	8.4	5.4
A. M. Pappas Life Science Ventures II, L.P. (4)	677,576	7.6	4.9
Entities affiliated with INVESCO Private Capital (5)	676,212	7.6	4.9
Entities affiliated with Camden Partners (6)	668,964	7.5	4.8
Agilent Technologies, Inc. (7)	518,656	5.8	3.7
Named Executive Officers and Directors:			
Richard O. Brajer (8)	451,373	4.9	3.2
Lucy G. Martindale (9)	146,382	1.6	1.0
Robert M. Honigberg (10)	12,933	*	*
Timothy J. Fischer (10)	87,376	*	*
Thomas S. Clement (10)	32,737	*	*
Buzz Benson (2)	804,210	9.0	5.8
Charles A. Sanders, M.D. (11)	175,429	1.9	1.2
Roderick A. Young (1)	–	–	–
Woodrow A. Myers, Jr., M.D. (10)	18,591	*	*
Robert J. Greczyn, Jr. (10)	20,288	*	*
John H. Landon (10)	65,716	*	*
Daniel J. Levangie (10)	32,333	*	*
Christopher W. Kersey, M.D. (6)	–	–	–
All current directors and executive officers as a group (12) (17 persons)	2,791,568	27.8	18.6

* Represents beneficial ownership of less than 1%.

(1) Consists of 29,364 shares of common stock and 1,536,688 shares of common stock issuable upon conversion of shares of preferred stock held by Three Arch Capital, L.P. (“TAC”) and 1,388 shares of common stock and 72,646 shares of common stock issuable upon conversion of shares of preferred stock held by TAC Associates, L.P. (“TACA”). TAC Management, L.L.C. (“TACM”), the general partner of TAC and TACA, may be deemed to have sole power to vote and sole power to dispose of shares directly owned by TAC and TACA. Wilfred Jaeger and Mark Wan are the managing members of TACM and may be deemed to have shared power to vote and shared power to dispose of shares directly owned by TAC and TACA. Roderick Young, one of our directors, is a Venture Partner with Three Arch Partners, but he does not have beneficial ownership over the shares held by TAC and TACA. The address for these entities is 3200 Alpine Road, Portola Valley, CA 94028.

(2) Consists of 15,376 shares of common stock and 577,284 shares of common stock issuable upon conversion of shares of preferred stock held by SightLine Healthcare Fund III, L.P. (“SHF III”); 100,056 shares of common stock issuable upon conversion of shares of preferred stock held by SightLine Healthcare Opportunity Fund, LLC (“SHOF”); and 111,494 shares of common stock issuable upon conversion of shares of preferred stock held by SightLine Healthcare Vintage Fund, L.P. (“SHVF”). SightLine Healthcare Management III, L.P., the general partner of SHF III, may be deemed to have sole power to vote and sole power to dispose of shares directly owned by SHF III. SightLine Opportunity Management, LLC, the managing member of SHOF, may be deemed to have sole power to vote and sole power to dispose of shares directly owned by SHOF. SightLine Vintage Management, LLC, the general partner of SHVF, may be deemed to have sole power to vote and sole power to dispose of shares directly owned by SHVF. Buzz Benson, one of our directors, is a Managing Director of each of SightLine Healthcare Management III, L.P., SightLine Opportunity Management, LLC and SightLine Vintage Management, LLC and may be deemed to have shared power to vote and shared power to

dispose of the shares held by SHF III, SHOF and SHVF. The address for these entities is 50 South 6th Street, Suite 1490, Minneapolis, MN 55402.

(3) Consists of 465,520 shares of common stock, 7,370 shares of common stock issuable upon conversion of shares of preferred stock and 110,996 shares of common stock underlying options that are vested and exercisable within 60 days of December 31, 2012 that are held by Dr. Otvos directly. Also includes 180,167 shares of common stock held by Dr. Otvos' s spouse.

(4) Consists of 3,844 shares of common stock and 673,732 shares of common stock issuable upon conversion of shares of preferred stock, all owned of record by A.M. Pappas Life Science Ventures II, L.P. Arthur M. Pappas, in his capacity as chairman of the investment committee of AMP&A Management II, LLC, the general partner of A.M. Pappas Life Science Ventures II, L.P., has voting and dispositive authority over these shares. The address for this stockholder is 2520 Meridian Parkway, Suite 400, Durham, NC 27713.

(5) Consists of 423,851 shares of common stock issuable upon conversion of shares of preferred stock held by Chancellor V, L.P., 186,229 shares of common stock issuable upon conversion of shares of preferred stock held by Chancellor V-A, L.P. and 66,132 shares of common stock issuable upon conversion of shares of preferred stock held by Citiventure 2000, L.P. INVESCO Private Capital, Inc. is the managing member of IPC Direct Associates V, LLC, which is the general partner of each of Chancellor V, L.P., Chancellor V-A, L.P. and Citiventure 2000, L.P. The address of each of these funds is c/o INVESCO Private Capital, 1166 Avenue of the Americas, New York, NY 10036.

(6) Consists of 642,273 shares of common stock issuable upon conversion of shares of preferred stock held by Camden Partners Strategic Fund III, L.P. and 26,691 shares of common stock issuable upon conversion of shares of preferred stock held by Camden Partners Strategic Fund III-A, L.P. Camden Partners Strategic III, LLC is the General Partner of Camden Partners Strategic Fund III, L.P. and Camden Partners Strategic Fund III-A, L.P. Camden Partners Strategic Manager, LLC is the Managing Member of Camden Partners Strategic III, LLC. David L. Warnock, Donald W. Hughes and Richard M. Berkeley are the Managing Members of Camden Partners Strategic Manager, LLC and may be deemed to have shared voting and dispositive power over the shares held by Camden Partners Strategic Fund III, L.P. and Camden Partners Strategic Fund III-A, L.P. Christopher Kersey, one of our directors, is a Managing Member of entities affiliated with Camden Partners, but he does not have beneficial ownership over the shares held by Camden Partners Strategic Fund III, L.P. and Camden Partners Strategic Fund III-A, L.P. The address for these entities is 500 East Pratt Street, Suite 1200, Baltimore, Maryland 21202.

(7) Consists of shares of common stock issuable upon conversion of preferred stock. The address for this stockholder is 5301 Stevens Creek Boulevard, Santa Clara, CA 95051.

(8) Consists of 114,947 shares of common stock and 336,426 shares of common stock underlying options that are vested and exercisable within 60 days of December 31, 2012.

(9) Consists of 67,391 shares of common stock and 78,991 shares of common stock underlying options that are vested and exercisable within 60 days of December 31, 2012.

(10) Consists of shares of common stock underlying options that are vested and exercisable within 60 days of December 31, 2012.

(11) Consists of 8,730 shares of common stock, 1,114 shares of common stock issuable upon conversion of preferred stock and 165,585 shares of common stock underlying options that are vested and exercisable within 60 days of December 31, 2012.

(12) Includes shares beneficially owned by all current executive officers of the company. Consists of 843,131 shares of common stock, 797,318 shares of common stock issuable upon conversion of preferred stock and 1,151,119 shares of common stock underlying options that are vested and exercisable within 60 days of December 31, 2012.

DESCRIPTION OF CAPITAL STOCK

The description below of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is part, and by the applicable provisions of Delaware law.

General

Upon the completion of this offering, our amended and restated certificate of incorporation will authorize us to issue up to 75,000,000 shares of common stock, $0.001 par value per share, and 5,000,000 shares of preferred stock, $0.001 par value per share.

As of December 31, 2012, there were:

- 1,894,277 shares of common stock outstanding, and approximately 141 stockholders of record;
- 2,056,848 shares of common stock issuable upon exercise of outstanding options under our 1997 stock option plan and 2007 stock incentive plan;
- shares of our Series A convertible preferred stock outstanding that are convertible into an aggregate of 266,466 shares of our common stock, and approximately 50 Series A stockholders of record;
- shares of our Series A-1 convertible preferred stock outstanding that are convertible into an aggregate of 27,448 shares of our common stock, and three Series A-1 stockholders of record;
- shares of our Series B convertible preferred stock outstanding that are convertible into an aggregate of 179,867 shares of our common stock, and approximately 40 Series B stockholders of record;
- shares of our Series B-1 convertible preferred stock outstanding that are convertible into an aggregate of 5,820 shares of our common stock, and one Series B-1 stockholder of record;
- shares of our Series C convertible preferred stock outstanding that are convertible into an aggregate of 595,699 shares of our common stock, and approximately 90 Series C stockholders of record;
- shares of our Series C-1 convertible preferred stock outstanding that are convertible into an aggregate of 146,911 shares of our common stock, and nine Series C-1 stockholders of record;
- shares of our Series D convertible preferred stock outstanding that are convertible into an aggregate of 291,216 shares of our common stock, and approximately 40 Series D stockholders of record;
- shares of our Series D-1 convertible preferred stock outstanding that are convertible into an aggregate of 1,734,393 shares of our common stock, and 10 Series D-1 stockholders of record;
- shares of our Series E convertible preferred stock outstanding that are convertible into an aggregate of 2,288,579 shares of our common stock, and approximately 30 Series E stockholders of record; and
- shares of our Series F convertible preferred stock outstanding that are convertible into an aggregate of 1,458,119 shares of our common stock, and 16 Series F stockholders of record.

Common Stock

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Under our amended and restated certificate of incorporation and amended and restated bylaws, our stockholders will not have cumulative voting rights. Because of this, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

All currently outstanding shares of preferred stock will be converted automatically to common stock immediately prior to the completion of this offering.

Following the completion of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of us and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock.

We have no present plans to issue any shares of preferred stock.

Options

As of December 31, 2012, under our 1997 stock option plan and our 2007 stock incentive plan, options to purchase an aggregate of 2,056,848 shares of common stock were outstanding. For additional information regarding the terms of these plans, see "Management – Equity Incentive Plans."

Warrants

As of December 31, 2012, we had immediately exercisable warrants outstanding to purchase an aggregate of 73,564 shares of our Series E redeemable convertible preferred stock at an exercise price of $4.35 per share, which, following this offering, will be exercisable to purchase 35,677 shares of our common stock at an exercise price of $8.97 per share through December 20, 2022. We also have immediately exercisable warrants outstanding

to purchase an aggregate of 102,586 shares of our Series F redeemable convertible preferred stock at an exercise price of $4.35 per share, which, following this offering, will be exercisable to purchase 49,753 shares of our common stock at an exercise price of $8.97 per share, with expiration dates between December 13, 2013 and March 31, 2018. These warrants have net exercise provisions under which their holders may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our stock at the time of exercise of the warrants after deduction of the aggregate exercise price. Each of the warrants contains a provision for the adjustment of the exercise price and the number of shares issuable upon the exercise of the warrant in the event of stock dividends, stock splits, reorganizations, reclassifications and consolidations.

We have also granted registration rights to our warrant holders, as more fully described below under "– Registration Rights."

Registration Rights

We and some of the holders of our preferred stock and common stock have entered into a second amended and restated investor rights agreement, or investor rights agreement. The registration rights provisions of this agreement provide those holders with demand and piggyback registration rights with respect to the shares of common stock currently held by them and issuable to them upon conversion of our convertible preferred stock in connection with our initial public offering.

Pursuant to the terms of our currently outstanding warrants, the holders of these warrants generally have piggyback registration rights with respect to the shares of common stock issuable upon the conversion of the shares of preferred stock issuable upon exercise of these warrants.

Demand Registration Rights

At any time beginning 180 days after the completion of this offering, the holders of at least 40% of the shares issuable upon conversion of our Series D convertible preferred stock, Series D-1 convertible preferred stock and Series E convertible preferred stock in the aggregate have the right to demand that we file up to a total of two registration statements, and holders of at least 40% of the shares issuable upon conversion of our Series F convertible preferred stock have the right to demand that we file up to a total of two additional registration statements. These registration rights are subject to specified conditions and limitations, including the right of the underwriters, if any, to limit the number of shares included in any such registration under specified circumstances. Upon such a request, we will be required to use our best efforts to effect the registration as soon as possible. An aggregate of approximately 5.7 million shares of common stock will be entitled to these demand registration rights.

Piggyback Registration Rights

At any time after the completion of this offering, if we propose to register any of our securities under the Securities Act either for our own account or for the account of other stockholders, the holders of shares of common stock that are issued upon conversion of our convertible preferred stock, certain holders of shares of our common stock and the holders of our currently outstanding warrants will each be entitled to notice of the registration and will be entitled to include their shares of common stock in the registration statement. These piggyback registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances. An aggregate of approximately 7.1 million shares of common stock will be entitled to these piggyback registration rights.

Registration on Form S-3

At any time after we become eligible to file a registration statement on Form S-3, holders of shares of our common stock that are issued upon conversion of our convertible preferred stock will be entitled, upon their written request, to have such shares registered by us on a Form S-3 registration statement at our expense, provided that such requested registration has an anticipated aggregate offering size to the public of at least $1.0 million and we have not already effected two registrations on Form S-3 within the preceding 12-month period and subject to other specified conditions and limitations. An aggregate of approximately 5.7 million shares of common stock will be entitled to these Form S-3 registration rights.

Expenses of Registration

We will pay all expenses relating to any demand, piggyback or Form S-3 registration, other than underwriting discounts and commissions and stock transfer taxes, subject to specified conditions and limitations.

Termination of Registration Rights

The registration rights granted under the investor rights agreement will terminate with respect to shares held by a holder upon the later of the third anniversary of the closing of this offering or when such holder holds less than one percent of our outstanding stock and all registrable securities held by such holder may be sold in accordance with Rule 144 under the Securities Act within a 90-day period.

Anti-Takeover Provisions

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or

the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person' s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Certificate of Incorporation and Bylaws to be in Effect Upon the Completion of this Offering

Our amended and restated certificate of incorporation to be in effect upon the completion of this offering, or our restated certificate, will provide for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our restated certificate and our amended and restated bylaws to be effective upon the completion of this offering, or our restated bylaws, will also provide that directors may be removed by the stockholders only for cause upon the vote of 66 2/3% or more of our outstanding common stock. Furthermore, the authorized number of directors may be changed only by resolution of the board of directors, and vacancies and newly created directorships on the board of directors may, except as otherwise required by law or determined by the board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

Our restated certificate and restated bylaws will also provide that all stockholder actions must be effected at a duly called meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. Our restated bylaws will also provide that only our chairman of the board, chief executive officer or the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

Our restated bylaws will also provide that stockholders seeking to present proposals to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and will specify requirements as to the form and content of a stockholder' s notice.

Our restated certificate and restated bylaws will provide that the stockholders cannot amend many of the provisions described above except by a vote of 66 2/3% or more of our outstanding common stock.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

Our amended and restated certificate of incorporation to be in effect upon the completion of this offering will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty owed by any of our directors, officers or employees to us or our stockholders; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Limited. The transfer agent' s address is 250 Royall Street, Canton, MA 02021.

NASDAQ Global Market Listing

We have applied to list our common stock on The NASDAQ Global Market under the trading symbol "LPDX."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, no public market existed for our common stock. Future sales of shares of our common stock in the public market after this offering, or the perception that these sales could occur, could adversely affect prevailing market prices for our common stock and could impair our future ability to raise equity capital.

Based on the number of shares outstanding on December 31, 2012, upon completion of this offering and assuming no exercise of the underwriters' option to purchase additional shares, 13,888,795 shares of common stock will be outstanding, assuming no outstanding options or warrants are exercised. All of the shares of common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, except for any shares sold to our "affiliates," as that term is defined under Rule 144 under the Securities Act. The remaining 8,888,795 shares of common stock held by existing stockholders are "restricted securities," as that term is defined in Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if registered or if their resale qualifies for exemption from registration described below under Rule 144 or 701 promulgated under the Securities Act.

As a result of contractual restrictions described below and the provisions of Rules 144 and 701, the shares sold in this offering and the restricted securities will be available for sale in the public market as follows:

- the 5,000,000 shares sold in this offering and 772,291 of the existing restricted shares will be eligible for immediate sale upon the completion of this offering;
- approximately 26,364 restricted shares will be eligible for sale in the public market 90 days after the date of this prospectus, subject to the volume, manner of sale and other limitations under Rule 144 and Rule 701; and
- approximately 8,090,140 restricted shares will be eligible for sale in the public market upon expiration of lock-up agreements 180 days after the date of this prospectus subject in certain circumstances to the volume, manner of sale and other limitations under Rule 144 and Rule 701.

Rule 144

In general, persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of the company who owns either restricted or unrestricted shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144 under the Securities Act.

Non-Affiliates

Any person who is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale may sell an unlimited number of restricted securities under Rule 144 if:

- the restricted securities have been held for at least six months, including the holding period of any prior owner other than one of our affiliates;
- we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale; and
- we are current in our Exchange Act reporting at the time of sale.

Affiliates

Persons seeking to sell restricted securities who are our affiliates at the time of, or any time during the three months preceding, a sale would be subject to the restrictions described above. They are also subject to additional

restrictions, by which such person would be required to comply with the manner of sale and notice provisions of Rule 144 and would be entitled to sell within any three-month period only that number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 140,000 shares immediately after the completion of this offering based on the number of shares outstanding as of December 31, 2012; or
- the average weekly trading volume of our common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Additionally, persons who are our affiliates at the time of, or any time during the three months preceding, a sale may sell unrestricted securities under the requirements of Rule 144 described above, without regard to the six month holding period of Rule 144, which does not apply to sales of unrestricted securities.

Unlimited Resales by Non-Affiliates

Any person who is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale and has held the restricted securities for at least one year, including the holding period of any prior owner other than one of our affiliates, will be entitled to sell an unlimited number of restricted securities without regard to the length of time we have been subject to Exchange Act periodic reporting or whether we are current in our Exchange Act reporting.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and in the section of this prospectus titled “Underwriting” and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Form S-8 Registration Statements

As soon as practicable after the completion of this offering, we intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register the shares of our common stock that are issuable pursuant to our 1997 stock option plan, 2007 stock incentive plan and 2012 equity incentive plan. These registration statements will become effective immediately upon filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below and Rule 144 limitations applicable to affiliates.

Lock-Up Agreements

In connection with this offering, we, all of our officers and directors and substantially all of our holders of options, warrants and outstanding stock will have agreed that, without the prior written consent of Barclays Capital Inc., UBS Securities LLC and Piper Jaffray & Co. on behalf of the underwriters, neither we nor they will, during the period ending 180 days, subject to certain exceptions and subject to potential extension under specified circumstances, after the date of this prospectus:

- offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of common stock (including, without limitation, shares of common stock that may be deemed to be beneficially owned by us or them in accordance with the rules and regulations of the

Securities and Exchange Commission and shares of common stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for common stock;

enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock;

make any demand for or exercise any right or file or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of common stock or securities convertible, exercisable or exchangeable into common stock or any of our other securities; or

publicly disclose the intention to do any of the foregoing for a period of 180 days after the date of this prospectus.

These agreements are described in further detail below under the section titled "Underwriting."

Registration Rights

Upon the completion of this offering, the holders of approximately 7.1 million shares of our common stock and common stock issuable upon the conversion of our preferred upon the exercise of outstanding warrants, or their transferees, as well as additional shares that may be acquired by certain holders after the completion of this offering, will be entitled to specified rights with respect to the registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See "Description of Capital Stock – Registration Rights" for additional information.

CERTAIN MATERIAL U.S. FEDERAL TAX CONSIDERATIONS

The following is a general discussion of the material U.S. federal income and estate tax considerations applicable to non-U.S. holders with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. All prospective non-U.S. holders of our common stock should consult their own tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock. In general, a non-U.S. holder means a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

an individual who is a citizen or resident of the United States;

a corporation created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;

an estate, the income of which is subject to U.S. federal income tax regardless of its source; or

a trust if (1) a U.S. court can exercise primary supervision over the trust' s administration and one or more U.S. persons have the authority to control all of the trust' s substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, published administrative rulings and judicial decisions, all as in effect as of the date of this prospectus. These laws are subject to change and to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus.

We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code. This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder' s individual circumstances, nor does it address any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as tax-exempt organizations, financial institutions, controlled foreign corporations, passive foreign investment companies and certain U.S. expatriates.

In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as partnerships for United States federal income tax purposes) or persons who hold their common stock through partnerships or other pass-through entities for U.S. federal income tax purposes. If a partnership, including any entity or arrangement treated as a partnership for United States federal income tax purposes, holds shares of our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. Such partners and partnerships should consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of our common stock.

There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, an opinion of counsel with respect to the U.S. federal income or estate tax consequences to a non-U.S. holder of the purchase, ownership or disposition of our common stock.

Distributions on Our Common Stock

Distributions, if any, on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the

excess will be treated as a tax-free return of the non-U.S. holder' s investment, up to such holder' s adjusted tax basis in the common stock. Any remaining excess will be treated as capital gain from the sale or exchange of such common stock, subject to the tax treatment described below in "Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock."

Dividends paid to a non-U.S. holder will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder' s country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder' s country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder' s country of residence generally will be required to provide a properly executed IRS Form W-8BEN (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Gain on Sale, Exchange or Other Disposition of Our Common Stock

In general, a non-U.S. holder will not be subject to any U.S. federal income tax or withholding tax on any gain realized upon such holder' s sale, exchange or other disposition of shares of our common stock unless:

- the gain is effectively connected with a U.S. trade or business of the non-U.S. holder and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained by such non-U.S. holder, in which case the non-U.S. holder generally will be taxed at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" also may apply;

- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax on the net gain derived from the disposition, which may be offset by U.S. source capital losses of the non-U.S. holder, if any; or

- we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder' s holding period, if shorter) a "U.S. real property holding corporation," unless (1) our common stock is regularly traded on an established securities market and (2) the non-U.S. holder holds no more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of (i) the 5-year period ending on the date of the disposition or (ii) the period that the non-U.S. holder held our common stock. If we are determined to be a U.S. real property holding corporation, provided that our common stock is regularly traded on an established securities market, no U.S. withholding tax would apply to the proceeds payable to a non-U.S. holder from a sale of our

common stock. However, in the event we are determined to be a U.S. real property holding corporation, if the non-U.S. holder holds more than 5% of our common stock as described above the non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

U.S. Federal Estate Tax

Shares of our common stock that are owned or treated as owned at the time of death by an individual who is not a citizen or resident of the United States, as specifically defined for U.S. federal estate tax purposes, are considered U.S. situs assets and will be included in the individual' s gross estate for U.S. federal estate tax purposes. Such shares, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the dividends on our common stock paid to such holder and the tax withheld, if any, with respect to such dividends. Non-U.S. holders will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to the U.S. withholding tax, as described above in "Distributions on Our Common Stock," generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may be allowed as a credit against the non-U.S. holder' s U.S. federal income tax liability, if any, and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

Legislation Relating to Withholding on Foreign Accounts

Legislation enacted in 2010 may impose withholding taxes on certain types of payments made to "foreign financial institutions" and certain other non-U.S. entities. Under this legislation, the failure to comply with additional certification, information reporting and other specified requirements could result in withholding tax being imposed on payments of dividends and sales proceeds on disposition of our common stock. The legislation

imposes a 30% withholding tax on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a foreign financial institution or to a foreign non-financial entity, in each case that is not otherwise exempt, unless (1) the foreign financial institution undertakes certain diligence and reporting obligations or (2) the foreign non-financial entity either certifies it does not have any substantial U.S. owners or furnishes identifying information regarding each substantial U.S. owner. In addition, if the payee is a foreign financial institution, it generally must enter into an agreement with the U.S. Treasury requiring, among other things, that it undertake to identify accounts held by certain U.S. persons or U.S.-owned foreign entities, annually report certain information about such accounts and withhold 30% on payments to account holders whose actions prevent it from complying with these reporting and other requirements or otherwise be exempt or deemed compliant (including pursuant to an intergovernmental agreement). Under certain transition rules, any obligations to withhold under the legislation with respect to payments of dividends on our common stock will not begin until January 1, 2014 and, with respect to the gross proceeds of a sale or other disposition of our common stock, will not begin until January 1, 2017. Prospective investors should consult their tax advisors regarding this legislation.

UNDERWRITING

Barclays Capital Inc., UBS Securities LLC and Piper Jaffray & Co. are acting as the joint book-running managers and as the representatives of the underwriters named below. Under the terms of an underwriting agreement, which will be filed as an exhibit to the registration statement, each of the underwriters named below has severally agreed to purchase from us the respective number of shares of common stock shown opposite its name below:

Underwriters	Number of Shares
Barclays Capital Inc.	
UBS Securities LLC	
Piper Jaffray & Co.	
TOTAL	5,000,000

The underwriting agreement provides that the underwriters' obligation to purchase shares of common stock depends on the satisfaction of the conditions contained in the underwriting agreement including:

- the obligation to purchase all of the shares of common stock offered hereby (other than those shares of common stock covered by their option to purchase additional shares as described below), if any of the shares are purchased;
- the representations and warranties made by us to the underwriters are true;
- there is no material change in our business or the financial markets; and
- we deliver customary closing documents to the underwriters.

Commissions and Expenses

The following table summarizes the underwriting discounts and commissions we will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares. The underwriting fee is the difference between the initial price to the public and the amount the underwriters pay to us for the shares.

	No Exercise	Full Exercise
Per Share		
Total		

The representatives of the underwriters have advised us that the underwriters propose to offer the shares of common stock directly to the public at the public offering price on the cover of this prospectus and to selected dealers, which may include the underwriters, at such offering price less a selling concession not in excess of $ per share. After the offering, the representatives may change the offering price and other selling terms. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The expenses of the offering that are payable by us are estimated to be $3.5 million (excluding underwriting discounts and commissions).

Option to Purchase Additional Shares

We have granted the underwriters an option exercisable for 30 days after the date of the underwriting agreement, to purchase, from time to time, in whole or in part, up to an aggregate of 750,000 shares at the public offering price less underwriting discounts and commissions. This option may be exercised if the underwriters sell

more than 5,000,000 shares in connection with this offering. To the extent that this option is exercised, each underwriter will be obligated, subject to certain conditions, to purchase its pro rata portion of these additional shares based on the underwriter' s underwriting commitment in the offering as indicated in the table at the beginning of this Underwriting section.

Lock-Up Agreements

We, all of our directors and executive officers and substantially all of our holders of options, warrants and outstanding stock will have agreed that, without the prior written consent of the representatives and subject to specified exceptions and subject to potential extension under specified circumstances, neither we nor they will directly or indirectly, (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of common stock (including, without limitation, shares of common stock that may be deemed to be beneficially owned by us or them in accordance with the rules and regulations of the Securities and Exchange Commission and shares of common stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for common stock, (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock, (3) make any demand for or exercise any right or file or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of common stock or securities convertible, exercisable or exchangeable into common stock or any of our other securities, or (4) publicly disclose the intention to do any of the foregoing for a period of 180 days after the date of this prospectus.

The representatives, in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice. When determining whether or not to release common stock and other securities from lock-up agreements, the representatives will consider, among other factors, the holder' s reasons for requesting the release, the number of shares of common stock and other securities for which the release is being requested and market conditions at the time.

Some of our existing stockholders and their affiliated entities, including holders of more than 5% of our common stock, have indicated an interest in purchasing shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing stockholders and any of these existing stockholders could determine to purchase more, less or no shares in this offering. Any shares purchased by these stockholders will be subject to the lock-up agreements contemplated in the immediately preceding paragraphs.

Offering Price Determination

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be negotiated between the representatives and us. In determining the initial public offering price of our common stock, the representatives will consider:

- the history and prospects for the industry in which we compete;
- our financial information;
- the ability of our management and our business potential and earning prospects;
- the prevailing securities markets at the time of this offering; and
- the recent market prices of, and the demand for, publicly traded shares of generally comparable companies.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make for these liabilities.

Stabilization, Short Positions and Penalty Bids

The representatives may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Securities Exchange Act of 1934:

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

A short position involves a sale by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase in the offering, which creates the syndicate short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriters in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising their option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in their option to purchase additional shares. The underwriters may close out any short position by either exercising their option to purchase additional shares and/or purchasing shares in the open market. 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 to the price at which they may purchase shares through their option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction 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 the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on NASDAQ or otherwise and, if commenced, may be discontinued at any time.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that any transaction, once commenced, will not be discontinued without notice.

Electronic Distribution

A prospectus in electronic format may be made available on the Internet sites or through other online services maintained by one or more of the underwriters and/or selling group members participating in this offering, or by their affiliates. In those cases, prospective investors may view offering terms online and, depending upon the particular underwriter or selling group member, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the representatives on the same basis as other allocations.

Other than the prospectus in electronic format, the information on any underwriter' s or selling group member' s web site and any information contained in any other web site maintained by an underwriter or selling group member is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or any underwriter or selling group member in its capacity as underwriter or selling group member and should not be relied upon by investors.

NASDAQ

We have applied to list our shares of common stock on The NASDAQ Global Market under the symbol "LPDX."

Discretionary Sales

The underwriters have informed us that they do not intend to confirm sales to discretionary accounts that exceed 5% of the total number of shares offered by them.

Stamp Taxes

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Relationships

The underwriters have in the past and may in the future perform investment banking and advisory services for us from time to time for which they expect to receive customary fees and expense reimbursement. In August 2006, we issued to Piper Jaffray & Co. warrants to purchase 41,379 shares of our Series F preferred stock at an exercise price of $4.35 per share. These warrants were net exercised in December 2012 for an aggregate of 17,941 shares of Series F preferred stock, which upon the completion of this offering will be converted into 8,701 shares of common stock. In addition, Piper Jaffray & Co. and certain of its employees have an indirect interest in us through interests in certain funds affiliated with Sightline Partners LLC. Such indirect interest represents less than 1% of our common stock.

Selling Restrictions

European Economic Area

In relation to each member state of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), including each Relevant Member State that has implemented the 2010 PD Amending Directive with regard to persons to whom an offer of securities is addressed and the denomination per unit of the offer of securities (each, an "Early Implementing Member State"), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date"), no offer of shares which are the subject of the offering contemplated by this prospectus supplement, or Shares, will be made to the public in that Relevant Member State (other than offers (the "Permitted Public Offers") where a prospectus will be published in relation to the Shares that has been approved by the competent authority in a 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 with effect from and including that Relevant Implementation Date, offers of Shares may be made to the public in that Relevant Member State at any time:

(a) to "qualified investors" as defined in the Prospectus Directive, including:

(i) (in the case of Relevant Member States other than Early Implementing Member States), 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 any legal entity which has two or more of (A) an

average of at least 250 employees during the last financial year; (B) a total balance sheet of more than 43,000,000 and (C) an annual turnover of more than 50,000,000 as shown in its last annual or consolidated accounts; or

(ii) (in the case of Early Implementing Member States), persons or entities that are described in points (1) to (4) of Section I of Annex II to Directive 2004/39/EC, and those who are treated on request as professional clients in accordance with Annex II to Directive 2004/39/EC, or recognized as eligible counterparties in accordance with Article 24 of Directive 2004/39/EC unless they have requested that they be treated as non-professional clients; or

(b) to fewer than 100 (or, in the case of Early Implementing Member States, 150) natural or legal persons (other than "qualified investors" as defined in the Prospectus Directive), as permitted in the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of Shares shall result in a requirement for the publication by the Company or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive or of a supplement to a prospectus pursuant to Article 16 of the Prospectus Directive.

Any person making or intending to make any offer within the European Economic Area of Shares which are the subject of the offering contemplated in this prospectus supplement should only do so in circumstances in which no obligation arises for the Company or any of the underwriters to produce a prospectus for such offer. Neither the Company nor the underwriters have authorized, nor do they authorize, the making of any offer of Shares through any financial intermediary, other than offers made by the underwriters which constitute the final offering of Shares contemplated in this prospectus supplement.

Each person in a Relevant Member State (other than a Relevant Member State where there is a Permitted Public Offer) who initially acquires any Shares or to whom any offer is made will be deemed to have represented, warranted and agreed to and with each underwriter and the Company that: (a) 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 (b) in the case of any Shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (i) the Shares acquired by it in the offering 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 defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale or (ii) where Shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those Shares to it is not treated under the Prospectus Directive as having been made to such persons.

For the purpose of the above provisions, the expression "an offer to the public" in relation to any Shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer of any Shares to be offered so as to enable an investor to decide to purchase any Shares, as the same may be varied in the Relevant Member State by any measure implementing the Prospectus Directive in the Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71 EC (including the 2010 PD Amending Directive, in the case of Early Implementing Member States) and includes any relevant implementing measure in each Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive ("Qualified Investors") that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (ii) high net worth entities, and other persons to whom it may

lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant persons should not act or rely on this document or any of its contents.

Switzerland

This document as well as any other material relating to the shares of common stock which are the subject of the offering contemplated by this prospectus supplement do not constitute an issue prospectus pursuant to Article 652a and/or 1156 of the Swiss Code of Obligations. The shares of common stock will not be listed on the SIX Swiss Exchange and, therefore, the documents relating to the shares of common stock, including, but not limited to, this document, do not claim to comply with the disclosure standards of the listing rules of SIX Swiss Exchange and corresponding prospectus schemes annexed to the listing rules of the SIX Swiss Exchange.

The shares of common stock are being offered in Switzerland by way of a private placement (i.e., to a small number of selected investors only, without any public offer and only to investors who do not purchase the shares of common stock with the intention to distribute them to the public). The investors will be individually approached by us from time to time.

This document as well as any other material relating to the shares of common stock is personal and confidential and do not constitute an offer to any other person. This document may only be used by those investors to whom it has been handed out in connection with the offering described herein and may neither directly nor indirectly be distributed or made available to other persons without our express consent. It may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in (or from) Switzerland.

Australia

This prospectus is not a formal disclosure document and has not been, nor will be, lodged with the Australian Securities and Investments Commission. It does not purport to contain all information that an investor or their professional advisers would expect to find in a prospectus or other disclosure document (as defined in the Corporations Act 2001 (Australia)) for the purposes of Part 6D.2 of the Corporations Act 2001 (Australia) or in a product disclosure statement for the purposes of Part 7.9 of the Corporations Act 2001 (Australia), in either case, in relation to the securities.

The securities are not being offered in Australia to "retail clients" as defined in sections 761G and 761GA of the Corporations Act 2001 (Australia). This offering is being made in Australia solely to "wholesale clients" for the purposes of section 761G of the Corporations Act 2001 (Australia) and, as such, no prospectus, product disclosure statement or other disclosure document in relation to the securities has been, or will be, prepared.

This prospectus does not constitute an offer in Australia other than to wholesale clients. By submitting an application for our securities, you represent and warrant to us that you are a wholesale client for the purposes of section 761G of the Corporations Act 2001 (Australia). If any recipient of this prospectus is not a wholesale client, no offer of, or invitation to apply for, our securities shall be deemed to be made to such recipient and no applications for our securities will be accepted from such recipient. Any offer to a recipient in Australia, and any agreement arising from acceptance of such offer, is personal and may only be accepted by the recipient. In addition, by applying for our securities you undertake to us that, for a period of 12 months from the date of issue of the securities, you will not transfer any interest in the securities to any person in Australia other than to a wholesale client.

Hong Kong

The shares of common stock may not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong

Kong) and any rules made under that Ordinance or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32, Laws of Hong Kong) or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares of common stock may be issued or may be in the possession of any person for the purpose of the issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to the shares of common stock which are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) or any rules made under that Ordinance.

Singapore

This prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Dubai International Financial Centre

This document relates to an exempt offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority. This document is intended for distribution only to persons of a type specified in those rules. It must not be delivered to, or relied on by, any other person. The Dubai Financial Services Authority has no responsibility for reviewing or verifying any documents in connection with exempt offers. The Dubai Financial Services Authority has not approved this document nor taken steps to verify the information set out in it, and has no responsibility for it. The Shares may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the Shares offered should conduct their own due diligence on the Shares. If you do not understand the contents of this document you should consult an authorized financial adviser.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Reston, Virginia. The underwriters are being represented by Gibson, Dunn & Crutcher LLP, New York, New York.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements at December 31, 2010 and 2011, and for each of the three years in the period ended December 31, 2011, as set forth in their report. We have included our financial statements in this prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP' s report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares of common stock being offered by this prospectus. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to LipoScience and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the Internet at the SEC' s website at *www.sec.gov*. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

Upon completion of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and web site of the SEC referred to above. We also maintain a website at *www.liposcience.com*, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus.

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
LipoScience, Inc.

We have audited the accompanying balance sheets of LipoScience, Inc. as of December 31, 2010 and 2011, and the related statements of operations, redeemable convertible preferred stock and stockholders' deficit and cash flows for each of the three years in the period ended December 31, 2011. These 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 standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company' s 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, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of LipoScience, Inc. at December 31, 2010 and 2011, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Raleigh, North Carolina
April 27, 2012, except for Note 18,
as to which the date is January 10, 2013

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LipoScience, Inc.
Balance Sheets

	December 31,		September 30,	Pro Forma September 30,
	2010	2011	2012	2012
			(unaudited)	
Assets				
Current assets:				
Cash and cash equivalents	$11,058,045	$12,482,621	$10,279,131	$5,079,131
Accounts receivable, net	4,193,950	5,626,177	8,057,204	8,057,204
Prepaid expenses and other	511,892	581,161	706,925	706,925
Total current assets	15,763,887	18,689,959	19,043,260	13,843,260
Property and equipment, net	2,498,241	5,292,467	9,538,113	9,538,113
Other noncurrent assets:				
Restricted cash	1,507,958	1,503,878	1,504,997	1,504,997
Intangible assets, net of accumulated amortization of $104,948, $127,877 and $142,186 at December 31, 2010, 2011 and September 30, 2012 (unaudited), respectively	367,538	552,700	627,962	627,962
Deferred financing costs	1,958	–	–	–
Deferred offering costs	–	2,045,924	2,802,325	2,802,325
Other assets	1,400	32,308	32,308	32,308
Total other noncurrent assets	1,878,854	4,134,810	4,967,592	4,967,592
Total assets	$20,140,982	$28,117,236	$33,548,965	$28,348,965
Liabilities, redeemable convertible preferred stock and stockholders' deficit				
Current liabilities:				
Accounts payable	$730,980	$1,281,534	$1,387,471	$1,387,471
Accrued expenses	2,167,641	4,413,877	4,178,208	4,178,208
Revolving line of credit	–	–	3,500,000	3,500,000
Current maturities of long-term debt	1,200,000	2,400,000	2,400,000	2,400,000
Current portion of obligations under capital leases	27,073	–	–	–
Other current liabilities	–	–	15,546	15,546
Total current liabilities	4,125,694	8,095,411	11,481,225	11,481,225
Long-term liabilities:				
Long-term debt, less current maturities	–	3,600,000	1,800,000	1,800,000
Preferred stock warrant liability	596,811	229,072	461,585	–
Other long-term liabilities	206,907	100,448	1,737,100	1,737,100
Total liabilities	4,929,412	12,024,931	15,479,910	15,018,325
Series D Redeemable Convertible Preferred Stock, par value $.001; 3,544,062 shares designated; 500,408 shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $2,612,130 (no shares authorized, issued or outstanding pro forma)	2,612,130	2,612,130	2,612,130	–
Series D-1 Redeemable Convertible Preferred Stock, par value $.001; 3,480,473 shares designated; 2,980,065 issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $15,555,940 (no shares authorized, issued or outstanding pro forma)	15,555,940	15,555,940	15,555,940	–
Series E Redeemable Convertible Preferred Stock, par value $.001; 5,059,330 shares designated; 4,617,602 issued and outstanding at December 31, 2010 and 4,718,752 issued and outstanding at	20,203,417	20,795,145	20,795,145	–

December 31, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $20,526,571 (no shares authorized, issued or outstanding pro forma)				
Series F Redeemable Convertible Preferred Stock, par value $.001; 3,118,678 shares designated; 2,988,506 issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $13,000,001 (no shares authorized, issued or outstanding pro forma)	17,472,233	18,200,001	18,200,001	–
	55,843,720	57,163,216	57,163,216	–
Stockholders' deficit:				
Series A Convertible Preferred Stock, par value $.001; 300,000 shares designated, 229,088 shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $1,291,195 (no shares authorized, issued or outstanding pro forma)	229	229	229	–
Series A-1 Convertible Preferred Stock, par value $.001; 252,700 shares designated, 23,612 shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $125,006 (no shares authorized, issued or outstanding pro forma)	24	24	24	–
Series B Convertible Preferred Stock, par value $.001; 166,667 shares designated, 154,536 shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $927,216 (no shares authorized, issued or outstanding pro forma)	155	155	155	–
Series B-1 Convertible Preferred Stock, par value $.001; 159,536 shares designated, 5,000 shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $30,000 (no shares authorized, issued or outstanding pro forma)	5	5	5	–
Series C Convertible Preferred Stock, par value $.001; 1,275,000 shares designated, 1,022,595 shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $4,090,380 (no shares authorized, issued or outstanding pro forma)	1,023	1,023	1,023	–
Series C-1 Convertible Preferred Stock, par value $.001; 1,274,774 shares designated, 252,179 shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012 (unaudited); aggregate liquidation preference of $1,008,716 (no shares authorized, issued or outstanding pro forma)	252	252	252	–
Common stock, $.001 par value; 90,000,000 shares authorized, 1,625,333, 1,695,485, 1,707,260, and 8,693,078 shares issued and outstanding at December 31, 2010 and 2011, September 30, 2012 (unaudited) and Pro Forma September 30, 2012 (unaudited), respectively	1,625	1,695	1,707	8,693
Additional paid-in capital	8,059,866	8,169,035	9,088,661	61,508,164
Accumulated deficit	(48,695,329)	(49,243,329)	(48,186,217)	(48,186,217)
Total stockholders' (deficit) equity	(40,632,150)	(41,070,911)	(39,094,161)	13,330,640
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$20,140,982	$28,117,236	$33,548,965	$28,348,965

See accompanying notes to financial statements.

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LipoScience, Inc.

Statements of Operations

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Revenues	$34,712,531	$39,368,192	$45,807,070	$33,327,511	$41,240,658
Cost of revenues	7,791,508	8,139,046	8,529,017	6,366,765	7,621,305
Gross profit	26,921,023	31,229,146	37,278,053	26,960,746	33,619,353
Operating expenses:					
Research and development	6,156,259	7,276,167	7,808,468	5,697,608	7,418,470
Sales and marketing	12,989,694	15,246,307	21,305,239	15,452,889	16,746,456
General and administrative	7,019,982	7,331,075	8,549,823	6,248,134	7,762,954
Gain on extinguishment of other long-term liabilities *(Note 9)*	–	(2,700,000)	–	–	–
Total operating expenses	26,165,935	27,153,549	37,663,530	27,398,631	31,927,880
Income (loss) from operations	755,088	4,075,597	(385,477)	(437,885)	1,691,473
Other (expense) income:					
Interest income	34,175	16,778	13,341	11,453	8,925
Interest expense	(269,404)	(154,582)	(349,607)	(238,441)	(370,544)
Loss on disposal of fixed assets	–	–	–	–	(29,717)
Loss on extinguishment of long-term debt	–	–	(59,403)	(59,403)	–
Other (expense) income	(260,216)	358,097	233,146	156,383	(243,025)
Total other (expense) income	(495,445)	220,293	(162,523)	(130,008)	(634,361)
Income (loss) before taxes	259,643	4,295,890	(548,000)	(567,893)	1,057,112
Income tax expense (benefit)	1,800	(16,131)	–	–	–
Net income (loss)	257,843	4,312,021	(548,000)	(567,893)	1,057,112
Accrual of dividends on redeemable convertible preferred stock	(1,040,000)	(1,040,000)	(612,602)	(612,602)	–
Undistributed earnings allocated to participating preferred stockholders	–	(2,655,089)	–	–	(849,752)
Net (loss) income attributable to common stockholders–basic	(782,157)	616,932	(1,160,602)	(1,180,495)	207,360
Undistributed earnings re-allocated to common stockholders	–	303,162	–	–	109,094
Net (loss) income attributable to common stockholders–diluted	$(782,157)	$920,094	$(1,160,602)	$(1,180,495)	$316,454
Net (loss) income per share attributable to common stockholders–basic	$(0.49)	$0.38	$(0.69)	$(0.71)	$0.12
Net (loss) income per share attributable to common stockholders–diluted	$(0.49)	$0.34	$(0.69)	$(0.71)	$0.11
Weighted average shares used to compute basic net (loss) income per share attributable to common stockholders	1,596,920	1,611,843	1,674,018	1,666,820	1,704,736
Weighted average shares used to compute diluted net (loss) income per share attributable to common stockholders	1,596,920	2,713,770	1,674,018	1,666,820	2,984,817
Pro forma net (loss) income per share:					
Pro forma net (loss) income per share of common stock–basic			$(0.09)		$0.07
Pro forma net (loss) income per share of common stock– diluted			$(0.09)		$0.06
Weighted-average shares of common stock outstanding used in computing pro forma net (loss) income per share–basic			8,659,971		8,690,689
Weighted-average shares of common stock outstanding used in computing pro forma net (loss) income per share–diluted			8,659,971		9,970,770

See accompanying notes to financial statements.

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LipoScience, Inc.

Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit

	Series D Redeemable Convertible Preferred Stock	Series D-1 Redeemable Convertible Preferred	Series E Redeemable Convertible Preferred Stock	Series F Redeemable Convertible Preferred Stock	Convertible Preferred Stock						Common Stock	Addition Paid-In Capita
					Series A	Series A-1	Series B	Series B-1	Series C	Series C-1		
Balance at December 31, 2008	$2,612,130	$15,555,940	$19,194,836	$14,997,381	$ 229	$ 24	$ 155	$ 5	$ 1,023	$ 252	$ 1,596	$9,271,63
Exercise of options	–	–	–	–	–	–	–	–	–	–	2	4,863
Accretion on redeemable convertible preferred stock	–	–	–	197,426	–	–	–	–	–	–	–	(197,42
Accrual of Series F dividends	–	–	–	1,040,000	–	–	–	–	–	–	–	(1,040,0
Stock-based compensation expense	–	–	–	–	–	–	–	–	–	–	–	580,395
Net income	–	–	–	–	–	–	–	–	–	–	–	–
Balance at December 31, 2009	2,612,130	15,555,940	19,194,836	16,234,807	229	24	155	5	1,023	252	1,598	8,619,46
Exercise of options and warrants	–	–	891,733	–	–	–	–	–	–	–	27	28,103
Reclassification of preferred stock warrant liabilities to redeemable convertible preferred stock upon exercises	–	–	116,848	–	–	–	–	–	–	–	–	–
Accretion on redeemable convertible preferred stock	–	–	–	197,426	–	–	–	–	–	–	–	(197,42
Accrual of Series F dividends	–	–	–	1,040,000	–	–	–	–	–	–	–	(1,040,0
Stock-based compensation expense	–	–	–	–	–	–	–	–	–	–	–	649,726
Net income	–	–	–	–	–	–	–	–	–	–	–	–
Balance at December 31, 2010	2,612,130	15,555,940	20,203,417	17,472,233	229	24	155	5	1,023	252	1,625	8,059,86
Exercise of options and warrants	–	–	440,003	–	–	–	–	–	–	–	70	185,734

Reclassification of preferred stock warrant liabilities to redeemable convertible preferred stock upon exercises	–	–	151,725	–	–	–	–	–	–	–	–	–
Accretion on redeemable convertible preferred stock	–	–	–	115,166	–	–	–	–	–	–	–	(115,166
Accrual of Series F dividends	–	–	–	612,602	–	–	–	–	–	–	–	(612,602
Stock-based compensation expense	–	–	–	–	–	–	–	–	–	–	–	651,203
Net loss	–	–	–	–	–	–	–	–	–	–	–	–
Balance at December 31, 2011	2,612,130	15,555,940	20,795,145	18,200,001	229	24	155	5	1,023	252	1,695	8,169,03
Exercise of options (unaudited)	–	–	–	–	–	–	–	–	–	–	12	38,158
Stock-based compensation (unaudited)	–	–	–	–	–	–	–	–	–	–	–	881,468
Net income (unaudited)	–	–	–	–	–	–	–	–	–	–	–	–
Balance at September 30, 2012 (unaudited)	$2,612,130	$15,555,940	$20,795,145	$18,200,001	$ 229	$ 24	$ 155	$ 5	$1,023	$ 252	$ 1,707	$9,088,66

See accompanying notes to financial statements.

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LipoScience, Inc.

Statements of Cash Flows

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Operating activities					
Net income (loss)	$257,843	$4,312,021	$(548,000)	$(567,893)	$1,057,112
Adjustments to reconcile net income (loss) to net cash provided by operating activities:					
Depreciation and amortization	759,035	564,382	507,671	391,868	950,119
Stock-based compensation expense	580,395	649,726	651,203	490,323	881,468
Fair value remeasurement of preferred stock warrant liability	203,256	(390,798)	(251,642)	(172,018)	232,513
	–	–	–	–	–
Gain on sale of property and equipment	–	(6,000)	–	–	–
Gain on extinguishment of other long-term liabilities	–	(2,700,000)	–	–	–
Loss on disposal of fixed assets	–	–	–	–	29,717
Loss on extinguishment of long-term debt	–	–	59,403	59,403	–
Changes in operating assets and liabilities:					
Accounts receivable, net	(287,507)	(830,847)	(1,432,227)	(1,220,099)	(2,431,027)
Prepaid expenses and other	(49,772)	(158,932)	(100,176)	(105,198)	(125,764)
Accounts payable, accrued expenses and other current liabilities	226,737	(215,054)	1,316,281	340,512	229,069
Other long-term liabilities	(53,229)	(81,159)	(106,459)	(91,128)	1,584,776
Net cash provided by (used in) operating activities	1,636,758	1,143,339	96,054	(874,230)	2,407,983
Investing activities					
Purchases of property and equipment	(408,458)	(1,137,854)	(1,963,173)	(588,383)	(5,726,963)
Proceeds from sale of property and equipment	–	6,000	–	–	–
Capitalized patent and trademark costs	(42,525)	(76,873)	(204,678)	(180,371)	(74,136)
Net cash used in investing activities	(450,983)	(1,208,727)	(2,167,851)	(768,754)	(5,801,099)
Financing activities					
Proceeds from revolving line of credit	–	–	–	–	3,500,000
Proceeds from long-term debt	2,500,000	–	6,000,000	6,000,000	–
Payments on long-term debt	(1,500,000)	(1,800,000)	(1,200,000)	(1,200,000)	(1,600,000)
Payments on capital leases	(59,232)	(62,534)	(27,073)	(27,073)	–
Changes in restricted cash for operating lease	723	(2,388)	4,080	3,454	(1,119)
Changes in deferred financing costs	23,500	23,500	1,958	1,958	–
Deferred offering costs	–	–	(1,908,399)	(1,551,160)	(747,425)
Proceeds from exercise of stock options and warrants	4,865	919,863	625,807	184,594	38,170
Net cash provided by (used in) financing activities	969,856	(921,559)	3,496,373	3,411,773	1,189,626
Net increase (decrease) in cash and cash equivalents	2,155,631	(986,947)	1,424,576	1,768,789	(2,203,490)
Cash and cash equivalents at beginning of period	9,889,361	12,044,992	11,058,045	11,058,045	12,482,621
Cash and cash equivalents at end of period	$12,044,992	$11,058,045	$12,482,621	$12,826,834	$10,279,131
Supplemental disclosure of cash flow information					

Cash paid for interest	$259,087	$163,282	$354,199	$244,241	$329,700
Cash paid for income taxes	$–	$35,000	$1,500	$1,500	$–
Supplemental disclosure of non-cash financing activities					
Accrual of Series F Redeemable Convertible Preferred Stock dividends	$1,040,000	$1,040,000	$612,602	$612,602	$–
Accretion on Series F Redeemable Convertible Preferred Stock	$197,426	$197,426	$115,166	$115,166	$–

See accompanying notes to financial statements.

LipoScience, Inc.

Notes to Financial Statements

1. Description of Business and Significant Accounting Policies

Description of Business

LipoScience, Inc. ("LipoScience" or the "Company") was incorporated under the laws of North Carolina in June 1994 under the name LipoMed, Inc. and reincorporated under the laws of Delaware in June 2000. In January 2002, the Company changed its corporate name to LipoScience, Inc. The Company is an *in vitro* diagnostic company pioneering a new field of personalized diagnostics based on nuclear magnetic resonance ("NMR") technology. The Company's first diagnostic test, the *NMR LipoProfile* test, is cleared by the U.S. Food and Drug Administration, or FDA, and directly measures the number of low density lipoprotein, ("LDL") particles in a blood sample and provides physicians and their patients with actionable information to personalize management of risk for heart disease.

Unaudited Interim Financial Information

The accompanying balance sheet as of September 30, 2012, the statements of operations and cash flows for the nine months ended September 30, 2011 and 2012 and the statement of redeemable convertible preferred stock and stockholders' deficit for the nine months ended September 30, 2012 are unaudited. The unaudited financial statements include all adjustments (consisting of normal recurring adjustments) which are, in the opinion of management, necessary for a fair presentation of results for such interim periods presented. The information disclosed in the notes to the financial statements for these periods is unaudited. The results of operations for the nine months ended September 30, 2012 are not necessarily indicative of the results to be expected for the entire fiscal year or any future period.

Unaudited Pro Forma Balance Sheet

The Board of Directors has authorized the Company to file a Registration Statement with the Securities and Exchange Commission ("SEC") permitting the Company to sell shares of common stock in an initial public offering ("IPO"). The unaudited pro forma balance sheet as of September 30, 2012 has been prepared assuming that upon the closing of the IPO, (i) all of the Company's outstanding shares of redeemable convertible and convertible preferred stock will automatically convert into an aggregate of 6,985,817 shares of common stock, (ii) accrued dividends of $5.2 million will be paid to its Series F redeemable convertible preferred stockholders, and (iii) warrants to purchase 143,965 shares of the Company's redeemable convertible preferred stock will automatically become warrants to purchase the Company's common stock resulting in the reclassification of the preferred stock warrant liability of $461,585 into additional paid-in capital immediately prior to the closing of the IPO.

Basis of Presentation and Use of Estimates

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and include all adjustments necessary for the fair presentation of the Company's financial position, results of operations and cash flows for the periods presented. In preparing the financial statements, management must make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities as of the date of the financial statements and reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates and assumptions used.

Reclassification

Certain reclassifications have been made to prior years' statements of cash flows and income tax footnote disclosures to conform to current period presentation. These reclassifications had no effect on prior years' net (loss) income or stockholders' deficit.

LipoScience, Inc.

Notes to Financial Statements (continued)

Immaterial Correction of an Error

In the second quarter of 2012, the Company corrected an error in the amount of $0.3 million to increase its depreciation expense and accumulated depreciation as a result of an error discovered in the capitalization of laboratory equipment used for research and development activities. The adjustment to depreciation expense and accumulated depreciation should have been recognized during fiscal years 2008, 2009, 2010 and 2011 in the amounts of $25,000, $90,000, $90,000 and $90,000, respectively. The impact of the correction resulted in an increase in depreciation expense and accumulated depreciation, and a corresponding decrease in net income of $0.3 million during the second quarter of 2012.

The Company assessed the materiality of making these corrections in the current period under Staff Accounting Bulletin ("SAB") No. 108, "Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements," ("SAB No. 108") and has determined that this correction is immaterial to all of the affected financial statements. Accordingly, the correction has been reflected in the Company' s unaudited financial statements for the nine months ended September 30, 2012.

Customers and Payors

The Company provides diagnostic tests to a broad range of customers. A majority of these tests are comprised of orders generated through clinical diagnostic laboratory customers and clinicians. The Company also receives requests from academic institutions as well as pharmaceutical companies. In most cases, the customer that orders the tests is not responsible for the payments for services. We consider a party that refers a test to us a "customer" and a party that reimburses us a "payor". Depending on the billing arrangement and applicable law, the payor may be (i) a clinical diagnostic laboratory, (ii) a third party responsible for providing health insurance coverage to patients, such as a health insurance plan or the traditional Medicare or Medicaid program, (iii) the physician or (iv) the patient or other party (such as academic institutions or pharmaceutical companies) who requested the test from us.

Revenue Recognition

The Company currently derives revenue from sales of its *NMR LipoProfile* test to clinical diagnostic laboratories and clinicians for use in patient care, from sales of ancillary tests for use in patient care requested in conjunction with the *NMR LipoProfile* test and from research contracts.

Revenues from diagnostic tests for patient care, which consist of sales of the *NMR LipoProfile* test and sales of ancillary tests, are recognized on the accrual basis when the following revenue recognition criteria are met: (1) persuasive evidence that an arrangement exists; (2) services have been rendered or at the time final results are reported; (3) the fee is fixed or determinable; and (4) collectibility is reasonably assured. Testing services provided for patient care are covered by clinical diagnostic laboratories, programs with commercial insurance carriers (including managed care organizations) and various governmental programs, primarily Medicare.

Billings for diagnostic tests for patient care under governmental and physician-based programs are included in revenues net of contractual adjustments. These contractual adjustments represent the difference between the final settlement amount paid by the program and the estimated settlement amount based on either the list price for tests performed or the reimbursement rate set by commercial insurance carriers or governmental programs. Estimated contractual adjustments are updated either upon notification from payors as to changes in existing reimbursement rates, which are typically received prior to changes going into effect, or upon a material variance between the final settlement and the estimated contractual adjustment originally established when the revenues were recognized. To date, the Company' s final settlement adjustments have not been material.

Revenues from contract research arrangements are generally derived from studies conducted with academic institutions and pharmaceutical companies. The specific methodology for revenue recognition is determined on a case-by-case basis according to the facts and circumstances applicable to a given agreement. The Company' s output, measured in terms of full-time equivalent level of effort or processing a set of diagnostic tests under a contractual protocol, typically triggers payment obligations under these agreements. Revenues are recognized as costs are incurred or diagnostic tests are processed. Contract research costs include all direct material and labor costs, equipment costs and fringe benefits. Advance payments received in excess of revenues recognized are classified as deferred revenue until such time as the revenue recognition criteria have been met.

Billing for diagnostic testing services for patient care is complex. In some cases, tests are performed in advance of payment and without certainty as to the outcome of the billing process, which may negatively affect revenues, cash flow and profitability. Payments are received from a variety of payors, including clinical diagnostic laboratories, commercial insurance companies (including managed care organizations), governmental payors (primarily Medicare) and individual patients. Each payor typically has different billing requirements, and the billing requirements of many payors have become increasingly stringent.

The Company generally assumes the financial risk related to collection, including the potential uncollectibility of accounts and the other complex factors identified above. Delays in collection and uncollectible bills may negatively affect the Company' s revenues, cash flow and profitability.

Shipping and Handling

The Company does not bill its customers for shipping and handling charges. All charges relating to inbound and outbound freight costs are incurred by the Company and recorded within cost of revenues. For the years ended December 31, 2009, 2010 and 2011, the Company incurred shipping and handling costs of approximately $1.3 million, $1.3 million and $1.5 million. The Company incurred shipping and handling costs of approximately $1.1 million and $1.2 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

Fair Value of Financial Instruments

The Company measures certain financial assets and liabilities at fair value based on the price that would be received for an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. As of December 31, 2011 and September 30, 2012 (unaudited), the Company' s financial instruments consist principally of cash and cash equivalents, accounts receivable, prepaid expenses and other, other long-term assets, accounts payable, accrued expenses, revolving line of credit, long-term debt and preferred stock warrant liability. See Note 2, "Fair Value Measurement," to our financial statements for further information on the fair value of our financial instruments.

Cash and Cash Equivalents

The Company invests its available cash balances in cash, certificates of deposits and money market funds. The Company considers all highly liquid instruments purchased with original maturity of three months or less at the time of purchase to be cash equivalents. Cash equivalents are stated at cost and the carrying amounts approximate fair value. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. Management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. Additionally, the Company has established guidelines regarding approved investments and maturities of investments, which are designed to maintain safety and liquidity. See Note 6 for a discussion of Restricted Cash.

LipoScience, Inc.

Notes to Financial Statements (continued)

Accounts Receivable

Accounts receivable are primarily amounts due from clinical diagnostic laboratories, commercial insurance companies (including managed care organizations), governmental programs (primarily Medicare), physicians, and individual patients.

Accounts receivable are reported net of an allowance for uncollectible accounts. The process of estimating the collection of accounts receivable involves significant assumptions and judgments. Specifically, the accounts receivable allowance is based on management' s analysis of current and past due accounts, collection experience in relation to amounts billed, channel mix, any specific customer collection issues that have been identified and other relevant information. The Company' s provision for uncollectible accounts is recorded as bad debt expense and included in general and administrative expenses. Historically, the Company has not experienced significant credit loss related to its customers or payors. Although the Company believes amounts provided are adequate, the ultimate amounts of uncollectible accounts receivable could be in excess of the amounts provided.

Property and Equipment

Property and equipment are stated at cost. Property and equipment financed under capital leases are initially recorded at the present value of minimum lease payments at the inception of the lease. Amortization of assets financed under capital leases is included with purchased property and equipment as part of depreciation and amortization.

Depreciation is calculated using the straight-line method over the estimated useful lives of the assets. Property and equipment under capital leases and leasehold improvements are amortized using the straight-line method over the shorter of the lease term or estimated useful life of the asset. Depreciable lives range from three to seven years for laboratory equipment, office equipment and furniture and fixtures and three years for software.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may be impaired and assesses their recoverability based upon anticipated future cash flows. If changes in circumstances lead the Company to believe that any of its long-lived assets may be impaired, the Company will (a) evaluate the extent to which the remaining book value of the asset is recoverable by comparing the future undiscounted cash flows estimated to be associated with the asset to the asset' s carrying amount and (b) write-down the carrying amount to market value or discounted cash flow value to the extent necessary. There has been no such impairment of long-lived assets to date.

Intangible Assets

Intangible assets include patent costs, trademark costs and technology licenses which are capitalized and amortized over estimated useful lives (generally nine to twenty years) using the straight-line method. Patent costs are expensed if the patent is not granted. On an ongoing basis, the Company assesses the recoverability of its intangible assets by determining its ability to generate undiscounted future cash flows sufficient to recover the unamortized balances over the remaining useful lives. Intangible assets determined to be unrecoverable are expensed in the period in which the determination is made.

During the years ended December 31, 2009, 2010 and 2011, the Company recorded amortization expense on intangible assets of approximately $12,000, $13,000 and $23,000, respectively, and approximately $18,000 and $14,000 for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

LipoScience, Inc.

Notes to Financial Statements (continued)

Deferred Offering Costs

Deferred offering costs represent legal, accounting and other direct costs related to the Company' s efforts to raise capital through an initial public offering ("IPO") of the Company' s common stock. Future costs related to the Company' s IPO activities will be deferred until the completion of the IPO, at which time they will be reclassified to additional paid-in capital as a reduction of the IPO proceeds. All deferred costs will be expensed if the Company terminates its plan for an IPO. In connection with the IPO, the Company has recorded approximately $2.8 million of deferred offering costs as a non-current asset in the accompanying balance sheet as of September 30, 2012 (unaudited).

Redeemable Convertible Preferred Stock

The Company classifies its redeemable convertible preferred stock, for which the Company does not control the redemption, outside of permanent equity. The Company records redeemable convertible preferred stock at fair value upon issuance, net of any issuance costs or discounts, and the carrying value is increased by periodic accretion to its redemption value. These increases are effected through charges against additional paid-in capital.

Preferred Stock Warrant Liability

The Company accounts for its freestanding warrants to purchase the Company' s Series E and Series F Redeemable Convertible Preferred Stock as liabilities at fair value on the accompanying balance sheets. The warrants are subject to re-measurement at each balance sheet date, and the change in fair value, if any, is recognized as other income (expense). The Company estimates the fair value of these warrants at the respective balance sheet dates using the Black-Scholes option pricing model. The estimated fair value of the Company calculated at each valuation date (see Note 11) is allocated to the shares of redeemable convertible preferred stock, convertible preferred stock, warrants to purchase shares of redeemable convertible preferred stock, and common stock, using a "hybrid" approach of the probability-weighted expected return method and the option pricing model. This approach treats the various components of the Company' s capital structure as a series of call options on the proceeds expected from the sale of the Company or the liquidation of the Company' s assets in the future. This approach defines the securities' fair values as functions of the current fair value of the Company and assumptions based on the securities' rights and preferences. These call options are then valued using the Black-Scholes option pricing model. As a result, the option-pricing model requires a number of assumptions to estimate the fair value including the anticipated timing of a potential liquidity event, such as an initial public offering, remaining contractual terms of the warrant, risk-free interest rates, expected dividend yield and the estimated volatility of the price of the underlying securities. The anticipated timing of a liquidity event utilized in these valuations was based on then current plans and estimates of our board of directors and management regarding an initial public offering. These assumptions are highly judgmental and could differ significantly in the future.

The fair values of outstanding Series E and Series F Redeemable Convertible Preferred Stock warrants were estimated using the Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Expected term (in years)	4.0	1.0-2.0	0.5-1.0	0.3-1.3	0.3-0.8
Risk-free interest rate	2.2%	0.3%-0.6%	0.1%-0.6%	0.1%-0.2%	0.1%-0.2%
Expected volatility	44 %	35%-42 %	36 %	34%-35 %	32 %
Expected dividend rate	0 %	0 %	0 %	0 %	0 %

LipoScience, Inc.

Notes to Financial Statements (continued)

The Company will continue to adjust the liability for changes in fair value until the earlier of (i) exercise of the warrants, (ii) conversion of the warrants into warrants to purchase common stock upon an event such as the completion of an initial public offering or (iii) expiration of the warrants. Upon conversion, the preferred stock warranty liability will be reclassified into additional paid-in capital.

A summary of warrant activity for the years ended December 31, 2009, 2010 and 2011 and for the nine months ended September 30, 2012 (unaudited) is presented below:

	Number of Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2008	776,896	$ 4.35	2.31	$ 3,160,249
Granted	–	–	–	–
Exercised	–	–	–	–
Forfeited/Canceled	–	–	–	–
Outstanding, December 31, 2009	776,896	4.35	1.31	3,059,111
Granted	–	–	–	–
Exercised	(204,996)	4.35	–	–
Forfeited/Canceled	(340,578)	4.35	–	–
Outstanding and Exercisable, December 31, 2010	231,322	4.35	2.36	845,704
Granted	13,793	4.35	–	–
Exercised	(101,150)	4.35	–	–
Forfeited/Canceled	–	–	–	–
Outstanding and Exercisable, December 31, 2011	143,965	4.35	2.86	801,717
Granted (unaudited)	–	–	–	–
Exercised (unaudited)	–	–	–	–
Forfeited/Canceled (unaudited)	–	–	–	–
Outstanding and Exercisable, September 30, 2012 (unaudited)	143,965	4.35	2.11	839,859

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the warrants and the estimated fair market value of the Company' s Series E and Series F Redeemable Convertible Preferred Stock as of the respective dates.

The following table summarizes additional information about warrants outstanding and exercisable at December 31, 2010 and 2011:

	Warrants Outstanding and Exercisable as of December 31,
Underlying Stock	

	Number of Shares		Weighted Average Remaining Life (Years)		Weighted Average Exercise Price		Weighted Average Fair Value per share	
	2010	2011	2010	2011	2010	2011	2010	2011
Series E Redeemable Convertible Preferred Stock	101,150	–	1.00	–	$4.35	$–	$2.58	$–
Series F Redeemable Convertible Preferred Stock	130,172	143,965	3.41	2.86	4.35	4.35	2.58	2.14

The following table summarizes additional information about warrants outstanding and exercisable at September 30, 2012 (unaudited):

	Warrants Outstanding and Exercisable as of September 30, 2012 (unaudited)			
Underlying Stock	Number of Shares	Weighted Average Remaining Life (Years)	Weighted Average Exercise Price	Weighted Average Fair Value per share
Series F Redeemable Convertible Preferred Stock	143,965	2.11	4.35	3.21

Concentration of Credit Risk and Other Risks

The Company derives its revenues from diagnostic testing services provided for patient care and contract research arrangements with institutional customers. The Company operates in one industry segment. Substantially all of the Company' s historical revenues have been derived from the sale of the *NMR LipoProfile* test.

The Company' s principal financial instruments subject to potential concentration of credit risk are cash equivalents and trade accounts receivable, which are unsecured. Through September 30, 2012 (unaudited), no material losses have been incurred.

Revenues from customers representing 10% or more of total revenues for the respective periods, are summarized as follows:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
LabCorp	34 %	33 %	33 %	32 %	29 %
Health Diagnostics Laboratory	–	*	21 %	20 %	32 %

* Less than 10%.

The Company' s accounts receivable due from these significant customers as a percentage of total accounts receivable for the respective periods is summarized as follows:

	As of December 31,		As of September 30,
	2010	2011	2012
			(unaudited)
LabCorp	19 %	20 %	27 %
Health Diagnostics Laboratory	20	30	33 %

The Company depends on a limited number of suppliers, including single-source suppliers, of various critical components used in its NMR analyzers. The loss of these suppliers, or their failure to supply the Company with the necessary components on a timely basis, could cause delays in the diagnostic testing process and adversely affect the Company.

Research and Development Expenses

Research and development expenses include all costs associated with the development of nuclear magnetic resonance technology products and are charged to expense as incurred. Research and development expenses include direct costs and an allocation of indirect costs, including amortization, depreciation, telephone, rent, supplies, insurance and repairs and maintenance.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires, among other things, that deferred income taxes be provided for temporary differences between the tax basis of the Company' s assets and liabilities and their financial statement reported amounts. In addition, deferred tax assets are recorded for the future benefit of utilizing net operating losses and research and development credit carryforwards. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company has adopted the accounting guidance for uncertainties in income taxes, which proscribes a recognition threshold and measurement process for recording uncertain tax positions taken, or expected to be taken, in a tax return in the financial statements. Additionally, the guidance also proscribes a new treatment for the derecognition, classification, accounting in interim periods and disclosure requirements for uncertain tax positions. The Company accrues for the estimated amount of taxes for uncertain tax positions if it is more likely than not that the Company would be required to pay such additional taxes. An uncertain tax position will not be recognized if it has less than a 50% likelihood of being sustained. As of the date of adoption of this guidance, the Company did not have any accrued interest or penalties associated with any unrecognized tax positions, and there were no such interest or penalties recognized during the years ended December 31, 2009, 2010 or 2011.

Advertising

Advertising costs, which are included in sales and marketing expenses, are expensed as incurred. Advertising expense was $0.3 million, $0.2 million and $0.9 million for the years ended December 31, 2009, 2010 and 2011, respectively, and $0.6 million and $0.7 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

Stock-Based Compensation

The Company accounts for stock-based compensation arrangements with employees and non-employee directors using a fair value method which requires the recognition of compensation expense for costs related to all stock-based payments, including stock options. The fair value method requires the Company to estimate the fair value of stock-based payment awards on the date of grant using an option pricing model.

Stock-based compensation costs are based on the fair value of the underlying option calculated using the Black-Scholes option-pricing model on the date of grant for stock options and recognized as expense on a straight-line basis over the requisite service period, which is the vesting period. Determining the appropriate fair value model and related assumptions requires judgment, including estimating stock price volatility, forfeiture rates and expected term. The expected volatility rates are estimated based on the actual volatility of comparable public companies over the expected term. The expected term for the years ended December 31, 2009, 2010 and 2011 and the nine months ended September 30, 2012 (unaudited) represents the average time that options are expected to be outstanding based on the mid-point between the vesting date and the end of the contractual term of the award. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company has not paid dividends and does not anticipate paying a cash dividend in the foreseeable future and, accordingly, uses an expected dividend yield of zero. The risk-free interest rate is based on the rate of U.S. Treasury securities with maturities consistent with the estimated expected term of the awards. The measurement of nonemployee share-based compensation is subject to periodic adjustments as the underlying equity instruments vest and is recognized as an expense over the period over which services are received.

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Notes to Financial Statements (continued)

Segment Reporting

The Company operates in one operating segment. The Company' s chief operating decision maker (the "CODM"), its chief executive officer, manages the Company' s operations on an integrated basis for purposes of allocating resources. When evaluating the Company' s financial performance, the CODM reviews separate revenue information for the Company' s patient care testing and its research services, while all other financial information is reviewed on a combined basis. All of the Company' s principal operations and decision-making functions are located in the United States. Accordingly, the Company has determined that it has a single reporting segment.

Off-Balance Sheet Arrangements

Through September 30, 2012 (unaudited), the Company has not entered into any off-balance sheet arrangements, other than the operating leases described in Note 16, and does not have any holdings in variable interest entities.

Net (Loss) Income Per Share

The Company computes net (loss) income per share in accordance with the accounting guidance regarding the computation of earnings or net loss per share by companies that have issued securities other than common stock that contractually entitle the holder to participate in earnings and dividends. The guidance requires earnings or net loss attributable to common stockholders for the period, after deduction of preferred stock preferences, to be allocated between the common and preferred stockholders based on their respective rights to receive dividends. The guidance does not require the presentation of basic and diluted net (loss) income per share for securities other than common stock; therefore, net (loss) income per share amounts only pertain to the Company' s common stock. Since the Company' s participating preferred stock was not contractually required to share in the Company' s losses, in applying the two-class method to compute basic net (loss) income per share, no allocation was made to preferred stock if a net loss existed.

Basic net (loss) income per share is computed by dividing net (loss) income allocable to common stockholders, which is net (loss) income after deduction of any required returns to preferred stockholders prior to paying dividends to the common stock and assuming current income for the period had been distributed based on the respective rights of the common and preferred stockholders to receive dividends, by the weighted average number of shares of common stock outstanding during the period. Diluted net (loss) income per share is computed on the basis of the weighted average number of shares of common stock plus dilutive potential common shares outstanding during the period. Because of their anti-dilutive effect, the following common share equivalents, consisting of convertible preferred shares, redeemable convertible preferred shares, common stock options and warrants, have been excluded from the diluted loss per share calculations for the respective periods presented:

Anti-Dilutive Common Share Equivalents	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Convertible Preferred Stock (Series A, A-1, B, B-1, C, and C-1)	1,222,211	1,222,211	1,222,211	1,222,211	1,222,211
Redeemable Convertible Preferred Stock (Series D, D-1, E and F)	5,615,127	5,714,549	5,763,606	5,714,549	5,763,606
Common Stock Options	2,154,461	40,315	2,266,155	78,532	32,555
Warrants	376,782	112,189	69,821	–	–
	9,368,581	7,089,264	9,321,793	7,015,292	7,018,372

Unaudited Pro Forma Net Income (Loss) Per Share

The unaudited pro forma basic and diluted net income (loss) per share for the year ended December 31, 2011 and the nine months ended September 30, 2012 reflect the conversion of all outstanding shares of redeemable convertible and convertible preferred stock into common stock. The unaudited pro forma balance sheet and pro forma basic and diluted net income (loss) per share have been presented in accordance with SEC Staff Accounting Bulletin Topic 1.B.3. The pro forma balance sheet gives effect to the accrued dividends to be paid to the Company' s Series F redeemable convertible preferred stockholders upon completion of the initial public offering, which totaled $5.2 million as of December 31, 2011 and the nine months ended September 30, 2012. Pro forma net income (loss) per share assumes that additional common shares are issued to give effect to the dividend payment described above. The number of shares deemed for accounting purposes to have been issued to pay the dividend payment described above is 371,429 and 295,921 for the year ended December 31, 2011 and the nine months ended September 30, 2012, respectively. This number was calculated assuming an initial public offering price of $14.00 per share (the midpoint of the range set forth on the cover page of this prospectus), but only the amount that exceeds the respective period' s earnings. Pro forma net income (loss) per share does not give effect to potentially dilutive securities where the impact would be anti-dilutive. Also, the numerator in the pro forma basic and diluted net income (loss) per share calculation has been adjusted to remove gains and losses resulting from re-measurements of the outstanding convertible preferred stock warrant liability for the periods presented as it is assumed that these warrants will be converted to potentially dilutive shares prior to an initial public offering and will no longer require periodic revaluation.

Because of their anti-dilutive effect, the following common share equivalents, consisting of common stock options and warrants, have been excluded from the unaudited pro forma diluted loss per share calculations for the respective periods presented:

Anti-Dilutive Common Share Equivalents – Unaudited Pro Forma	Year Ended December 31, 2011	Nine Months Ended September 30, 2012
Common Stock Options	2,266,155	32,555
Warrants	69,821	–
	2,335,976	32,555

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Notes to Financial Statements (continued)

A reconciliation of the numerator and denominator used in the computation of basic and diluted net (loss) income per share allocable to common stockholders follows:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Historical net (loss) income per share:					
Numerator:					
Net income (loss)	$257,843	$4,312,021	$(548,000)	$(567,893)	$1,057,112
Less: Accrual of dividends on Series F redeemable convertible preferred stock	(1,040,000)	(1,040,000)	(612,602)	(612,602)	–
Less: Undistributed earnings allocated to participating preferred shares	–	(2,655,089)	–	–	(849,752)
Net (loss) income attributable to common stockholders - basic	(782,157)	616,932	(1,160,602)	(1,180,495)	207,360
Add: Undistributed earnings re-allocated to common stockholders	–	303,162	–	–	109,094
Net (loss) income attributable to common stockholders - diluted	$(782,157)	$920,094	$(1,160,602)	$(1,180,495)	$316,454
Denominator:					
Weighted average common shares outstanding - basic	1,596,920	1,611,843	1,674,018	1,666,820	1,704,736
Dilutive effect of common stock equivalent shares resulting from common stock options and warrants	–	1,101,927	–	–	1,280,081
Weighted average common shares outstanding - diluted	1,596,920	2,713,770	1,674,018	1,666,820	2,984,817
Net (loss) income per common share:					
Net (loss) income per share attributable to common stockholders - basic	$(0.49)	$0.38	$(0.69)	$(0.71)	$0.12
Net (loss) income per share attributable to common stockholders - diluted	$(0.49)	$0.34	$(0.69)	$(0.71)	$0.11
Pro forma net (loss) income per share (unaudited):					
Numerator					
Net (loss) income attributable to common shareholders - basic			$(1,160,602)		$207,360
Pro forma adjustments:					
Accrual of dividends on redeemable preferred stock			612,602		–
Undistributed earnings allocated to participating preferred stockholders			–		849,752
Mark-to-market adjustment to preferred stock warrant liability			(251,642)		(461,585)
Net (loss) income used to compute pro forma net (loss) income per share			$(799,642)		$595,527
Denominator					
Weighted average shares of common stock outstanding used in computing net (loss) income per share of common stock, basic			1,674,154		1,704,872
Pro forma adjustments to reflect assumed weighted-average effect of conversion of all outstanding preferred stock			6,985,817		6,985,817
Pro forma adjustments to reflect assumed common shares sold in the offering to give effect to the payment of dividends on redeemable preferred stock			371,429		295,921
Denominator for pro forma basic net (loss) income per common share			9,031,400		8,986,610
Pro forma net (loss) income per common share - basic			$(0.09)		$0.07

Weighted average shares of common stock outstanding used in computing proforma net (loss) income per common share – basic	9,031,400	8,986,610
Pro forma adjustments to reflect assumed conversion of common stock options and warrants under the treasury method	–	1,280,081
Denominator for pro forma diluted net (loss) income per common share	9,031,400	10,266,691
Pro forma net (loss) income per common share – diluted	$(0.09)	$0.06

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Notes to Financial Statements (continued)

Recent Accounting Pronouncements

In January 2010, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2010-06, *Fair Value Measurements and Disclosures (Topic 820): Improving Disclosures about Fair Value Measurements* (Update No. 2010-06). Update No. 2010-06 requires new disclosures for fair value measures and provides clarification for existing disclosure requirements. Specifically, this update requires an entity to disclose separately the amounts of significant transfers in and out of Level I and Level II fair value measurements and to describe the reasons for the transfers; and to disclose separately information about purchases, sales, issuances and settlements in the reconciliation for fair value measurements using significant unobservable inputs, or Level III inputs. This update clarifies existing disclosure requirements for the level of disaggregation used for classes of assets and liabilities measured at fair value and requires disclosure about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements using Level II and Level III inputs. This update is effective for interim and annual reporting periods beginning after December 15, 2009, except for certain Level III activity disclosure requirements that will be effective for reporting periods beginning after December 15, 2010. Accordingly, the Company adopted this update on January 1, 2010. Other than requiring additional disclosures, adoption of this new update did not have a material impact on the Company' s financial statements.

In February 2010, the FASB issued ASU No. 2010-09, *Subsequent Events (Topic 855): Amendments to Certain Recognition and Disclosure Requirements* (Update No. 2010-09). Update No. 2010-09 provides clarification regarding the date through which subsequent events are evaluated. The modification to the subsequent events guidance removes the requirement to disclose the date through which subsequent events were evaluated in both originally issued and reissued financial statements for SEC filers. Accordingly, the Company adopted this amendment on February 24, 2010. Adoption of this new guidance did not have a material impact on the Company' s financial statements.

In January 2011, the FASB issued ASU No. 2011-01, *Receivables* (Topic 310): *Deferral of the Effective Date of Disclosures about Troubled Debt Restructurings* (Update No. 2010-20). Update No. 2010-20 temporarily delays the effective date of the disclosures about troubled debt restructurings in ASU No. 2010-20, *Receivables* (Topic 310): *Disclosures about the Credit Quality of Financing Receivables and the Allowance for Credit Losses*, for public entities. The delay is intended to allow the FASB time to complete its deliberations on what constitutes a troubled debt restructuring. The effective date of the new disclosures about troubled debt restructurings for public entities and the guidance for determining what constitutes a troubled debt restructuring will then be coordinated. This deferral has no material impact on the Company' s financial statements.

In January 2011, the FASB issued ASU No. 2011-02- *Receivables* (Topic 310): *A Creditor' s Determination of Whether a Restructuring Is a Troubled Debt Restructuring*. The amendments in this update provide additional guidance to assist creditors in determining whether a restructuring of a receivable meets the criteria to be considered a troubled debt restructuring. For public companies, the new guidance is effective for interim and annual periods beginning on or after June 15, 2011, and applies retrospectively to restructurings occurring on or after the beginning of the fiscal year of adoption. Early application is permitted. Accordingly, the Company adopted this amendment as of January 1, 2011. Adoption of this new guidance did not have a material impact on the Company' s financial statements.

In July 2011, the FASB issued ASU No. 2011-07, *Health Care Entities* (Topic 954): *Presentation and Disclosure of Patient Service Revenue, Provisions for Bad Debts, and the Allowance for Doubtful Accounts for Certain Health Care Entities*. The amendments in this update require that certain health care entities change the presentation of their statement of operations by reclassifying the provision for bad debts associated with patient service revenue from an operating expense to a deduction from patient service revenue (net of contractual

allowances and discounts). In addition, the amendments also require enhanced disclosure about policies for recognizing revenue and assessing bad debts and disclosures of qualitative and quantitative information about changes in the allowance for doubtful accounts. For public companies, the new guidance is effective for interim and annual periods beginning after December 15, 2011. Early adoption is permitted. The adoption of this new guidance did not have a material impact on the Company' s financial statements.

In May 2011, the FASB issued ASU No. 2011-04, *Fair Value Measurement and Disclosures (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and International Financial Reporting Standards*. The amendments in this update amends current guidance to achieve a consistent definition of fair value and ensure that the fair value measurement and disclosure requirements are similar between U.S. GAAP and International Financial Reporting Standards. Consequently, the amendments change certain fair value measurement principles and enhance the disclosure requirements particularly for Level 3 fair value measurements. For public companies, the new guidance is effective, on a prospective basis, for interim and annual periods beginning on or after December 15, 2011. Early adoption is permitted. The adoption of this new guidance required expanded disclosure only and did not have an impact on the Company' s financial position, results of operations or cash flows.

2. Fair Value Measurement

As a basis for determining the fair value of certain of the Company' s financial instruments, the Company utilizes a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level I – Observable inputs such as quoted prices in active markets for identical assets or liabilities.
- Level II – Observable inputs, other than Level I prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level III – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. The carrying amount of certain of the Company' s financial instruments, including accounts receivable, prepaid expenses and other, other long-term assets, accounts payable and accrued expenses, approximate fair value due to their short maturities. The carrying value of the Company' s capital lease obligations approximate fair value because the interest rates under those obligations approximate market rates of interest available to the Company for similar instruments.

The fair value of the Company' s revolving line of credit and long-term debt were estimated using the discounted cash flow method, which is based on the future expected cash flows, discounted to their present values, using a discount rate that approximates market rates. Such fair value measurements are categorized as Level II under the fair value hierarchy as of September 30, 2012 (unaudited).

The following table sets forth the carrying value and fair value of the Company' s long-term debt as of December 31, 2010 and 2011 and September 30, 2012 (unaudited):

	December 31, 2010		December 31, 2011		September 30, 2012 (unaudited)	
	Fair Value	Carrying Value	Fair Value	Carrying Value	Fair Value	Carrying Value
Revolving Line of Credit	$–	$–	$–	$–	$3,469,153	$3,500,000
Long Term Debt	1,118,881	1,200,000	5,788,641	6,000,000	4,129,958	4,200,000

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Notes to Financial Statements (continued)

Recurring Fair Value Measurements

The Company' s financial instruments that are measured at fair value on a recurring basis consist only of cash equivalents and the preferred stock warrant liability. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company' s assessment of the significance of a particular input to the entire fair value measurement requires management to make judgments and consider factors specific to the asset or liability.

Cash equivalents

All of the Company' s cash equivalents, which include certificates of deposits and money market funds, are classified within Level I of the fair value hierarchy because they are valued using quoted market prices.

Preferred stock warrant liability

The fair value determination of the Company' s preferred stock warrant liability required a number of assumptions, including significant unobservable inputs that reflect the Company' s own assumptions about the assumptions a market participant would use in valuing the liability, and therefore are classified within Level III of the fair value hierarchy. The significant unobservable inputs used in the fair value measurement of the Company' s preferred stock warrant liability are (i) probability weighting of potential liquidity event outcomes, (ii) the implied value of the underlying preferred shares derived in the IPO scenario and (iii) the weighted average cost of capital ("WACC"). Significant increases (decreases) in the probability weighting of potential liquidity event outcomes and the implied value of the underlying preferred stock in isolation would result in a significantly higher (lower) fair value measurement. Conversely, significant increases (decreases) in the anticipated timing of a liquidity event and WACC inputs in isolation would result in a significantly lower (higher) fair value measurement.

The following table provides a summary of the significant unobservable inputs used to determine the fair value of the Company' s preferred stock warrant liability as of September 30, 2012 (unaudited):

	Fair Value at September 30, 2012 (unaudited)	Valuation Technique	Significant Unobservable Inputs	Input Range/ Value
Preferred Stock Warrant Liability	$461,585	Black-Scholes Option Pricing Model*	Probability of potential liquidity event outcomes	5% to 70%
			Implied equity value	$6.71-$7.99
			Weighted average cost of capital	20%

* Using a hybrid approach of the probability-weighted expected return method and the option pricing model

The following table sets forth the Company' s financial instruments that were measured at fair value as of December 31, 2010 and 2011 and September 30, 2012 (unaudited) by level within the fair value hierarchy.

	December 31, 2010			December 31, 2011			September 30, 2012 (unaudited)		
	Level I	Level III	Total	Level I	Level III	Total	Level I	Level III	Total
Assets									
Certificates of deposits	$8,360,115	$–	$8,360,115	$8,961,552	$–	$8,961,552	$5,251,568	$–	$5,251,568
Money market funds	4,140,285	–	4,140,285	4,961,882	–	4,961,882	6,437,308	–	6,437,308
Total assets measured at fair value	$12,500,400	$–	$12,500,400	$13,923,434	$–	$13,923,434	$11,688,876	$–	$11,688,876
Liabilities									

Preferred stock warrants	$–	$596,811	$596,811	$–	$229,072	$229,072	$–	$461,585	$461,585
Total liabilities measured at fair value	$–	$596,811	$596,811	$–	$229,072	$229,072	$–	$461,585	$461,585

The change in the fair value of the Level III preferred stock warrant liability is summarized below:

	December 31,			September 30,
	2009	2010	2011	2012
				(unaudited)
Fair value at beginning of period	$901,201	$1,104,457	$596,811	$ 229,072
Issuances	–	–	35,628	–
Exercises reclassed to additional paid in capital	–	(116,848)	(151,725)	–
Change in fair value recorded in other income (expense)	203,256	(390,798)	(251,642)	232,513
Fair value at end of period	$1,104,457	$596,811	$229,072	$ 461,585

For the nine months ended September 30, 2012 (unaudited), there were no transfers between Level I and Level II fair value hierarchy.

3. Cash and Cash Equivalents

Cash and cash equivalents consist of the following as of:

	December 31,		September 30,
	2010	2011	2012
			(unaudited)
Cash	$65,603	$63,065	$95,251
Certificates of deposit	8,360,115	8,961,552	5,251,568
Money market funds	2,632,327	3,458,004	4,932,312
Total cash and cash equivalents	$11,058,045	$12,482,621	$10,279,131

The Company has an arrangement with its primary bank that excess cash balances are swept each night to an overnight sweep deposits account. At December 31, 2010 and 2011 and September 30, 2012 (unaudited), the balance in the overnight sweep deposits account totaling $2.6 million, $3.5 million and $4.9 million, respectively, was invested in shares of a money market fund.

4. Accounts Receivable and Revenues

Accounts receivable, net, consists of the following as of:

	December 31,		September 30,
	2010	2011	2012
			(unaudited)
Accounts receivable	$5,898,123	$7,302,555	$9,580,166
Less allowance for uncollectible accounts receivable	(1,704,173)	(1,676,378)	(1,522,962)
Accounts receivable, net	$4,193,950	$5,626,177	$8,057,204

Activity for the allowance for uncollectible accounts receivable is as follows:

	Year Ended December 31,		Nine Months Ended September 30, 2012
	2010	2011	(unaudited)
Balance at beginning of period	$1,211,620	$1,704,173	$ 1,676,378
Provision for bad debt expense	1,745,414	1,384,325	756,115
Write-off, net of recoveries	(1,252,861)	(1,412,120)	(909,531)
Balance at end of period	$1,704,173	$1,676,378	$ 1,522,962

Revenues consist of the following:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Gross billings	$38,412,896	$43,128,301	$48,292,289	$35,240,269	$42,692,043
Less contractual adjustments	(3,700,365)	(3,760,109)	(2,485,219)	(1,912,758)	(1,451,385)
Revenues	$34,712,531	$39,368,192	$45,807,070	$33,327,511	$41,240,658

5. Property and Equipment

Property and equipment consists of the following as of:

	December 31,		September 30, 2012
	2010	2011	(unaudited)
Laboratory equipment	$6,716,486	$6,974,829	$9,137,358
Office equipment, furniture and fixtures	2,452,178	2,588,124	3,171,623
Leasehold improvements	1,338,207	1,338,207	2,524,162
Software	1,658,879	1,836,868	1,816,924
Construction in progress	1,752,093	4,338,184	4,740,214
	13,917,843	17,076,212	21,390,281
Less accumulated depreciation	(11,419,602)	(11,783,745)	(11,852,168)
Property and equipment, net	$2,498,241	$5,292,467	$9,538,113

For the years ended December 31, 2009, 2010 and 2011, the Company recorded depreciation expense of $0.7 million, $0.6 million and $0.5 million, respectively, and $0.4 million and $0.9 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

For the year ended December 31, 2011, the Company disposed of $0.1 million of fully depreciated assets. For the nine months ended September 30, 2012 (unaudited), the Company disposed of $30,000 of damaged assets and retired $0.9 million of fully depreciated assets. There were no such disposals or retirements for the years ended December 31, 2009 and 2010.

6. Restricted Cash

As of December 31, 2010 and 2011 and September 30, 2012 (unaudited), certificates of deposit totaling $1.5 million were pledged as security for the Company' s office and laboratory space operating lease. These funds

may be released by the bank upon the attainment of certain minimum benchmarks covering sales, cash flows and certain financial ratios.

7. Accrued Expenses

Accrued expenses consist of the following as of:

	December 31,		
	2010	2011	September 30, 2012 (unaudited)
Accrued wages and benefits	$725,342	$1,122,153	$ 1,456,345
Accrued bonus	644,753	1,375,724	1,725,001
Other accrued liabilities	797,546	1,916,000	996,862
Total accrued expenses	$2,167,641	$4,413,877	$ 4,178,208

8. Long-Term Debt and Line of Credit

In February 2008, the Company executed a loan agreement with a new financial institution. This loan agreement is comprised of a $3 million revolving line of credit with a variable interest rate equal to the greater of 6.75% or the prime rate plus 3.25% and a $4.5 million loan with a variable interest rate equal to the greater of 7.25% or the prime rate plus 3.75%. Collateral for the line of credit and the loan is substantially all tangible assets of the Company. The Company may borrow up to 80% of all eligible domestic accounts receivable that are under 90 days old. Advances under the accounts receivable facility will require monthly payments of interest only with the principle due at maturity. Repayment of the term loan commenced March 2009 in thirty equal monthly payments of principal, plus interest due.

In connection with executing this loan agreement, the Company issued warrants to the financial institution to purchase 75,000 shares of Series F Redeemable Convertible Preferred Stock at $4.35 per share. These warrants are exercisable at any time and expire on the seventh anniversary of their issuance date. The fair value of these warrants at issuance is being amortized as interest expense over the term of the debt and accreted into the carrying value of Series F Redeemable Convertible Preferred Stock through January 2011. The warrants were valued under the level III hierarchy as there are significant unobservable inputs. The fair value of the warrants was determined with the assistance of a third-party consultant using a probability weighted valuation model. Values were determined for the warrants based on assumptions for each liquidity scenario using a Black-Scholes pricing model. These values were discounted back to February 2008 (the issuance date) while applying estimated probabilities to each scenario and associated value on a weighted average basis. These scenarios included a potential initial public offering or potential acquisition at different times throughout 2010 and 2012. Accordingly, the Company determined the fair value of the warrants at issuance to be $70,500, which was recorded as a preferred stock warrant liability and related debt discount. As of December 31, 2010 and 2011 and September 30, 2012 (unaudited), the Company determined the fair value of these warrants to be $0.2 million, $0.1 million and $0.2 million, respectively.

On May 7, 2010, the Company entered into the third amendment to this loan agreement with the financial institution, which included a waiver to the Company' s violation of the stated milestone covenant as of April 30, 2010, and amendment to certain covenants on a prospective basis. Effective May 7, 2010, the amendment eliminates the stated milestone covenant and establishes a monthly revenue covenant based upon approved projected results, as approved by the Company' s Board of Directors.

On March 31, 2011, the Company entered into a fourth amendment (the 4th amendment) to the loan agreement to refinance its existing term loan outstanding that was set to mature in August 2011. The 4th

amendment is comprised of a $6.0 million term loan (Term Loan A) with a variable interest rate equal to the greater of 7.25% or the prime rate plus 3.75%, and a $4.0 million revolving line of credit with a variable interest rate equal to the greater of 6.25% or the prime rate plus 3.00%. Amounts borrowed pursuant to the 4th amendment are secured by substantially all of the Company' s tangible assets. Under the 4th amendment, the Company must comply with specified financial covenants measured on a monthly basis and certain affirmative covenants, including a milestone covenant as it relates to the 510(k) filing for the final approval of the *Vantera* clinical analyzer with the United States Food and Drug Administration. In connection with the execution of the 4th Amendment, the Company drew down $6.0 million against Term Loan A and no amount was drawn on the line of credit. The proceeds from Term Loan A were used to repay the existing loan balance outstanding as of March 31, 2011 and to fund the Company' s working capital. Term Loan A is payable initially in nine monthly installments of interest only followed by thirty monthly installments of principal plus interest. The Company also incurred direct financing costs and issued warrants to purchase 13,793 shares of Series F Redeemable Convertible Preferred Stock at $4.35 per share to the financial institution. The Company determined the fair value of the warrants at issuance to be approximately $36,000. Both the direct financing costs and the fair value of these warrants were recorded as part of the loss on extinguishment of debt in accordance with the accounting guidance for debt modifications and extinguishments.

As of December 31, 2010 and 2011, the Company had no amounts drawn on this line of credit.

On March 29, 2012 (unaudited), the Company entered into a fifth amendment to the loan agreement to extend the maturity date of the $4.0 million revolving line of credit from March 31, 2012 to May 1, 2012. On April 30, 2012 (unaudited), the Company entered into a sixth amendment to the loan agreement to extend the maturity date of the $4.0 million revolving line of credit from May 1, 2012 to May 1, 2013. On May 18, 2012 (unaudited), the Company borrowed $3.5 million under this line of credit. As of September 30, 2012 (unaudited), the Company owed $3.5 million on this line of credit.

Long-term debt consists of the following as of:

	December 31,		September 30,
	2010	2011	2012
			(unaudited)
Note payable to financial institution with monthly payments of principal, including interest at a rate equal to the greater of 7.25% or the prime rate plus 3.75% from March 2009 to September 30, 2012	$1,200,000	$6,000,000	$ 4,200,000
Less current maturities of long-term debt	(1,200,000)	(2,400,000)	(2,400,000)
Long-term debt, less current maturities	$–	$3,600,000	$1,800,000

As of September 30, 2012 (unaudited), the annual principal payments on long-term debt and revolving line of credit are as follows:

2012	$600,000
2013	5,900,000
2014	1,200,000
2015	–
	$7,700,000

As of December 31, 2011 and September 30, 2012 (unaudited), management believes the Company was in compliance with all financial and non-financial covenants under this loan agreement and related amendments.

9. Gain on Extinguishment of Other Long-Term Liabilities

On September 16, 2009, the Company and a third-party research and development contractor entered into an agreement whereby each party would, subject to certain circumstances, release the other from certain obligations set forth in two prior agreements between the parties. One of the obligations of the Company was to pay $2.7 million to such third party for prior research and development services which was reflected in other long-term liabilities in the Company' s balance sheets. Based on events that occurred after September 16, 2009, the Company was released from the payment obligation of such long-term liabilities in September 2010. The Company recorded the release of these liabilities as a gain on extinguishment of other long-term liabilities within the operating expenses section of the statement of operations for the year ended December 31, 2010.

10. Redeemable Convertible Preferred Stock and Stockholders' Deficit

Capital Structure

As of December 31, 2010, the Company was authorized to issue up to 90,000,000 shares of $.001 par value common stock and 18,631,220 shares of preferred stock, of which:

300,000 shares were designated as $.001 par value Series A Convertible Preferred Stock (Series A),

252,700 shares were designated as $.001 par value Series A-1 Convertible Preferred Stock (Series A-1),

166,667 shares were designated as $.001 par value Series B Convertible Preferred Stock (Series B),

159,536 shares were designated as $.001 par value Series B-1 Convertible Preferred Stock (Series B-1),

1,275,000 shares were designated as $.001 par value Series C Convertible Preferred Stock (Series C),

1,274,774 shares were designated as $.001 par value Series C-1 Convertible Preferred Stock (Series C-1),

3,544,062 shares were designated as $.001 par value Series D Redeemable Convertible Preferred Stock (Series D),

3,480,473 shares were designated as $.001 par value Series D-1 Redeemable Convertible Preferred Stock (Series D-1),

5,059,330 shares were designated as $.001 par value, Series E Redeemable Convertible Preferred Stock (Series E) and

3,118,678 shares were designated as $.001 par value, Series F Redeemable Convertible Preferred Stock (Series F).

On March 30, 2011, the Company amended its certificate of incorporation to increase the number of authorized shares of preferred stock, specifically as it relates to Series F, from 3,118,678 to 3,132,471 shares. As of December 31, 2011 and September 30, 2012 (unaudited), the Company was authorized to issue up to 90,000,000 shares of $.001 par value common stock and 18,645,013 shares of preferred stock.

Series E Redeemable Convertible Preferred Stock

During 2003, the Company issued 3,493,066 shares of Series E for $15.2 million in cash and satisfaction of accrued interest on a bridge loan of approximately $15,000. The Company incurred related stock issuance costs paid in cash of $0.2 million. These stock issuance costs were accreted into the carrying value of Series E through July 2007.

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Notes to Financial Statements (continued)

During 2003, 2004 and 2005, the Company issued warrants to Series E investors to purchase an aggregate of 646,724 shares of Series E at an exercise price of $4.35 per share. These warrants are exercisable at any time and expire on the seventh anniversary of their respective issuance dates. The warrants were valued under the level III hierarchy as there are significant unobservable inputs. The fair value of the warrants was determined with the assistance of a third-party consultant using a probability weighted valuation model. Values were determined for the warrants based on assumptions for each liquidity scenario using a modified Black-Scholes pricing model. These values were discounted back to their respective issuance dates while applying estimated probabilities to each scenario and associated value on a weighted average basis. These scenarios included a potential initial public offering or potential acquisition at different times throughout 2010 and 2012. As of December 31, 2010 the Company determined the fair value of these warrants to be $0.3 million. The Company reclassified $0.1 million of Series E warrants to Series E Redeemable Convertible Preferred Stock in 2010 for 340,578 shares of expired warrants in 2010. During 2010, holders exercised Series E warrants for 204,996 shares, from which the Company received proceeds totaling $0.9 million. In 2011, holders exercised the remaining Series E warrants for 101,150 shares, from which the Company received proceeds totaling $0.4 million.

Series F Redeemable Convertible Preferred Stock

During 2006, the Company issued 2,988,506 shares of Series F for $13.0 million. The Company incurred related stock issuance costs paid in cash of $0.9 million. These stock issuance costs are being accreted into the carrying value of Series F through August 2011.

In connection with the Series F financing, the Company issued warrants to purchase an aggregate of 41,379 shares of Series F at an exercise price of $4.35 per share. The fair value of these warrants at issuance is being accreted into the carrying value of Series F through August 2011. These warrants are exercisable at any time and expire on the seventh anniversary of their issuance date. The warrants were valued under the level III hierarchy as there are significant unobservable inputs. The fair value of the warrants was determined with the assistance of a third-party consultant using a probability weighted valuation model. Values were determined for the warrants based on assumptions for each liquidity scenario using a modified Black-Scholes pricing model. These values were discounted back to their issuance dates while applying estimated probabilities to each scenario and associated value on a weighted average basis. These scenarios included a potential initial public offering or potential acquisition at different times throughout 2010 and 2012. As of December 31, 2010 and 2011 and September 30, 2012 (unaudited), the Company determined the fair value of these warrants to be $0.1 million.

The following is a summary of the rights, preferences and terms of the Company' s outstanding series of preferred stock:

Dividends - The holders of Series F Preferred Stock are entitled to receive prior, and in preference to, the holders of any other class or series of capital stock of the Company, dividends at the rate of $0.348 per annum per share of the Series F Preferred Stock (subject to adjustment for any stock or share dividends, stock splits, combinations, reclassifications or any similar event affecting the shares of Series F Preferred Stock) (the Series F Dividend), payable in cash and out of funds legally available therefore. The Series F Dividend shall be cumulative and shall accrue on a daily basis for a period of five years from the original issue date of the Series F Preferred Stock, whether or not declared, from and including the most recent date to which dividends have been paid, or if no dividends have been paid, from the date of original issue thereof. On the fifth anniversary of the original issue date of the Series F Preferred Stock, which occurred on August 2, 2011, the Series F Dividend ceased accruing, provided, that each share of Series F Preferred shall remain entitled to all unpaid Series F Dividends that accrued during such five-year period. The right to dividends shall accrue during such five-year period regardless of whether there are profits, surplus, or other funds legally available for payment of dividends. Through September 30, 2012 (unaudited), the maximum of $5.2 million of Series F Dividends has been accrued by the Company and is reflected in the carrying

amount of Series F on the balance sheet as of September 30, 2012 (unaudited). Subject to the rights of the Series F Preferred Stock set forth in this paragraph, if and when dividends are declared by the Board of Directors, holders of Series E, D, and D-1 are entitled to noncumulative dividends at a rate of 8% per annum of the original price per share, payable in cash out of legally available funds. The Series D, D-1 and E dividend shall be payable only when, as and if declared by the Board of Directors of the Corporation and shall be noncumulative. Through September 30, 2012 (unaudited), no cash dividends have been declared or paid by the Company.

Voting Rights - The holders of preferred stock are entitled to vote based on the number of common shares they would receive upon conversion.

Transfer Restrictions - The holders of each share of common and preferred stock are subject to transfer restrictions.

Liquidation - In the event of any liquidation, dissolution, or winding up of the Company (each, a Liquidity Event), the holders of Series F are entitled to receive, prior and in preference to any distribution of any assets or surplus funds to the other Preferred stockholders or holders of the common stock, $4.35 per share plus accrued dividends (the Series F Liquidation Preference). After payment of the Series F Liquidation Preference, the holders of Series E are entitled to receive, prior and in preference to any distribution of any assets or surplus funds to the other Preferred stockholders or holders of the common stock, $4.35 per share plus any declared but unpaid dividends (the Series E Liquidation Preference).

Any assets of the Company remaining after the payment to the holders of the Series F Preferred Stock and the holders of Series E Preferred Stock shall be distributed, on a pari passu basis, to the holders of Series D and D-1 (the Series D Preferred Stocks), in an amount equal to $5.22 per share plus any declared but unpaid dividends on such shares, if any (the D Preferred Stock Liquidation Preference). After payment of the D and D-1 Preferred Stock Liquidation Preference, the holders of Preferred Stock with preferences junior to the Series D and D-1 Preferred Stock shall be entitled to receive in preference to the common stock a per share amount equal to the original purchase price of each such series, plus any declared but unpaid dividends. After the payment of the applicable liquidation preference to the holders of all of the Preferred Stock, the residual, if any, will be distributed pro rata to the holders of common stock, the holders of the Series D Preferred Stock, Series D-1 Preferred Stock, Series E Preferred Stock, and Series F Preferred Stock (on an as-converted basis) (the Participating Distribution); provided, however, that the rights of the holders of Series D Preferred Stock, Series D-1 Preferred Stock, Series E Preferred Stock, and Series F Preferred Stock to participate in such residual with the holders of common stock shall terminate if the per share price to be paid to the holders of each such series of Preferred Stock in a Liquidity Event exceeds four times the purchase price per share for such series of Preferred Stock (adjusted for stock splits, dividends, recapitalizations and similar events). Notwithstanding the foregoing, if the holders of the common stock would not receive in the Participating Distribution an aggregate amount equal to at least $4.0 million, then, in lieu of the payment of the Participating Distribution, 10% of the total assets available for distribution in such Liquidity Event (or such lesser amount as remains available for distribution) will be paid to the holders of the common stock on a pro rata basis and any remaining assets after payment of such amount will be distributed pro rata to the holders of common stock, the holders of the Series D Preferred Stock, Series E Preferred Stock, and Series F Preferred Stock (on an as-converted basis) (the Common Carve-Out); provided however, that in the event that the holders of common stock are entitled to payment of the Common Carve-Out, the proceeds to be paid to the holders of the common stock pursuant to the Common Carve-Out shall not exceed $4.0 million.

A consolidation or merger of the Company with or into any other corporation or corporations or other entity or the effectuation by the Company of a transaction or series of related transactions in which more than 50% of the voting power of the Company is disposed of (unless the stockholders of the Company immediately prior to any such event shall, immediately thereafter, hold as a group the right to cast at least a majority of the votes of

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Notes to Financial Statements (continued)

all holders of voting securities of the resulting or surviving Company or entity on any matter on which any such holders of voting securities shall be entitled to vote), or a sale, conveyance, exclusive license or disposition of all or substantially all of the assets of the Company (except where such sale, conveyance, exclusive license or disposition is to a wholly owned subsidiary of the Company) (any such transaction, a Deemed Liquidity Event) shall be deemed to be a Liquidating Event, unless waived by the holders of a majority of the Series E Preferred Stock and the Series D Preferred Stock then outstanding, voting together as a single class, and the holders of a majority of the Series F Preferred Stock then outstanding. Upon the consummation of a Deemed Liquidity Event (including any a sale, conveyance, exclusive license or disposition of all or substantially all of the assets of the Company) in which the proceeds of such Deemed Liquidity Event are received by the Company, the Board of Directors of the Company shall, to the extent such proceeds are legally available for distribution, promptly cause such proceeds to be distributed to the stockholders of the Company in accordance with liquidation preferences listed above.

Conversion - Each share of preferred stock shall be convertible, at the option of the holder at any time after the date of issuance and without payment of additional consideration, into such number of common stock as is determined by dividing the consideration received by the Company for the purchase of each share of preferred stock by the conversion price in effect at the time of conversion. The conversion price shall initially be the amount of consideration received for each share of preferred stock. The conversion price is subject to adjustment in the event of stock dividends, stock splits, combinations and similar adjustments to capitalization. The conversion prices of each series of preferred stock are also subject to adjustment in the event that the Company issues additional equity securities at a per share price less than the applicable conversion price for each such series of preferred stock. The conversion prices per share are as follows:

Series	Original Conversion Price	Conversion Price as Adjusted December 31, 2011 and September 30, 2012 (unaudited)
A*	$ 6.00	$ 5.16
A-1*	6.00	5.16
B	6.00	5.16
B-1	6.00	5.16
C	4.00	6.87
C-1	4.00	6.87
D	5.22	8.97
D-1	5.22	8.97
E	4.35	8.97
F	4.35	8.97

* except for 66,666 shares, as to which the original conversion price is $4.50 and the current conversion price is $3.87.

Automatic Conversion - Each share of Series A, A-1, B, B-1, C and C-1 shall automatically be converted into common stock at the then effective conversion price upon the completion of an underwritten public offering involving the sale of the Company' s common stock. Each share of Series D, D-1, E and F shall automatically be converted into common stock at the then effective conversion price upon the completion of an underwritten public offering involving the sale of the Company' s common at a pre-money valuation of $132.0 million and gross proceeds of at least $25.0 million (a Qualified Public Offering). In January 2013, the Company' s certificate of incorporation was amended to remove the $132.0 million pre-money valuation condition from the definition of a Qualified Public Offering.

Preemptive Rights - The holders of preferred stock shall not be entitled to preemptive rights to acquire or subscribe for additional shares of securities that the Company authorizes to be issued. The holders of Series

D, D-1, E and F have contractual rights of first refusal (which expire upon a Qualified Public Offering) to participate in certain future offerings of stock by the Company on a pro rata basis.

Antidilution Provision - The conversion price of Series F and Series E will be subject to a full-ratchet dilution adjustment in the event the Company issues additional securities at a purchase price less than the applicable conversion price of Series F and Series E. The conversion price will be subject to adjustment for stock splits, stock dividends, recapitalizations, and other such events.

In connection with the offering of Series E, the Company created several new series of preferred stock (Series A-1, B-1, C-1 and D-1) with rights and preferences identical to the existing respective series (Series A, B, C and D) except that the shares of the new series are entitled to a full-ratchet dilution adjustment in the event the Company issues additional securities at a purchase price less than the applicable conversion price for each series. Any holder of Series A, B, C or D who invested its pro-rata percentage in Series E was entitled to exchange its shares for Series A-1, B-1, C-1 or D-1, respectively.

The conversion price of Series D shall be adjusted on a weighted average basis if additional securities (as defined) are issued at a price less than the then existing conversion price.

Redemption - At any time on or after on August 2, 2011, the holders of at least 40% of the issued and outstanding shares of Series D, D-1, E and F (the Electing Holders) can request the Company redeem all of their shares of each Series at a price for each share equal to its original purchase price (subject to adjustment in the event of stock dividends, stock splits, combinations, etc.), plus any accrued but unpaid dividends. Upon election by the Electing Holders to redeem their shares of Series D, D-1, E or F, the Company shall pay cash to the holders for the redemption value in three equal installments over three years at an interest rate of 8% per annum from the date of the initial payment until the redemption amount is paid in full.

Common Stock Reserved for Future Issuance

The Company had reserved shares of common stock for future issuance as summarized in the table below.

	December 31, 2011	September 30, 2012 (unaudited)
For conversion of Series A Convertible Preferred Stock	266,466	266,466
For conversion of Series A-1 Convertible Preferred Stock	27,448	27,448
For conversion of Series B Convertible Preferred Stock	179,867	179,867
For conversion of Series B-1 Convertible Preferred Stock	5,820	5,820
For conversion of Series C Convertible Preferred Stock	595,699	595,699
For conversion of Series C-1 Convertible Preferred Stock	146,911	146,911
For conversion of Series D Redeemable Convertible Preferred Stock	291,216	291,216
For conversion of Series D-1 Redeemable Convertible Preferred Stock	1,734,393	1,734,393
For conversion of Series E Redeemable Convertible Preferred Stock	2,288,579	2,288,579
For conversion of Series F Redeemable Convertible Preferred Stock	1,449,418	1,449,418
Outstanding Series F Redeemable Convertible Preferred Stock Warrants	69,821	69,821
Outstanding employee stock options	2,266,155	2,375,803
Possible future issuance under stock option plan	252,350	328,884
Total shares reserved	9,574,143	9,760,325

11. Stock Option and Equity Incentive Plans

On September 12, 1997, the Board of Directors adopted the Stock Option Plan (the 1997 Plan) to create an additional incentive for key employees, directors and consultants or advisors of the Company. Both incentive

stock options, which meet the requirements of Section 422 of the Internal Revenue Code, and nonqualified stock options, could be granted under the 1997 Plan. The exercise price of all options was determined by the Board of Directors, provided that such price for incentive stock options was not to be less than the estimated fair market value of the Company' s stock on the date of grant. The options vest based on terms in the stock option agreements (generally over four years). The 1997 Plan expired on September 12, 2007.

On October 25, 2007, the Board of Directors adopted the 2007 Stock Incentive Plan (the 2007 Plan) to replace the expired 1997 Plan. The terms of the 2007 Plan are consistent with the 1997 Plan.

Stock Option Repricing Program

On September 2, 2009, the Company' s board of directors approved a voluntary repricing program of certain common stock options with exercise prices above the fair market value of the Company' s common stock as of that date. In accordance with this repricing program, employees who had outstanding common stock options as of September 30, 2009 with an exercise price greater than the fair value of the Company' s common stock as of September 30, 2009, or $2.50 per share, were allowed to modify their original options to have an exercise price of $2.50 per share. In exchange for the lower exercise price, participating employees were required to relinquish 25% of the stock options that they elected to have repriced at $2.50 per share. The repricing program did not modify any other terms of the stock options. Options to purchase a total of 886,095 shares of common stock were repriced, resulting in additional compensation expense of approximately $37,000 during the year ended December 31, 2009, as all repriced options were fully vested at the time of repricing.

The following table summarizes activity under the Company' s 1997 Plan and 2007 Plan for the periods presented:

	Shares Available for Grant	Total Stock Options Outstanding	Weighted Average Exercise Price
Balance at December 31, 2008	386,917	2,108,527	$ 4.60
Authorized	291,000	–	–
Granted	(358,615)	358,615	2.42
Exercised	–	(1,616)	3.02
Forfeited under the expired 1997 Plan	–	(276,407)	5.68
Forfeited	34,658	(34,658)	2.64
Balance at December 31, 2009	353,960	2,154,461	3.26
Authorized	436,500	–	–
Granted	(372,360)	372,360	5.51
Exercised	–	(27,383)	1.04
Forfeited under the expired 1997 Plan	–	(114,264)	1.72
Forfeited	80,232	(80,232)	2.93
Balance at December 31, 2010	498,332	2,304,942	3.74
Authorized	–	–	–
Granted	(354,579)	354,579	7.86
Exercised	–	(70,152)	2.64
Forfeited under the expired 1997 Plan	–	(214,610)	4.75
Forfeited	108,604	(108,604)	4.85
Balance at December 31, 2011	252,357	2,266,155	4.25
Authorized (unaudited)	291,000	–	–

Granted (unaudited)	(295,018)	295,018	11.41
Exercised (unaudited)	–	(11,775)	3.24
Forfeited under the expired 1997 Plan (unaudited)	–	(93,050)	10.27
Forfeited (unaudited)	80,545	(80,545)	5.72
Balance at September 30, 2012 (unaudited)	328,884	2,375,803	4.89

LipoScience, Inc.

Notes to Financial Statements (continued)

The Company engaged a third-party consultant to assist in the determination of the estimated fair market value of the Company' s common stock. The dates of the Company' s contemporaneous valuations have not always coincided with the dates of its stock-based compensation grants. In such instances, management' s estimates have been based on the most recent contemporaneous valuation of the Company' s common stock and its assessment of additional objective and subjective factors it believed were relevant and which may have changed from the date of the most recent contemporaneous valuation through the date of the grant. In addition, the Company performed retrospective valuations as of September 30, 2009, June 30, 2010 and December 31, 2010 using similar methodologies as were used in the contemporaneous valuations. These retrospective valuations resulted in new estimates of fair value of the Company' s common stock at each respective period. Had the Company used these revised common stock fair values for financial reporting purposes, the effect would not have been material and, therefore, no adjustments were made to the Company' s financial statements.

In conducting the valuation of its common stock, the Company used a methodology that is consistent with the methods outlined in the AICPA Practice Aid Valuation of Privately-Held-Company Equity Securities Issued as Compensation. The methodology used derived equity values utilizing a probability-weighted expected return method, or PWERM, that weighs various potential liquidity outcomes with each outcome assigned a probability to arrive at a weighted equity value for all valuations conducted as of December 31, 2009 and thereafter.

For each of the possible events, a range of future equity values is estimated, based on the market and income approaches and over a range of possible event dates, all plus or minus a standard deviation for value and timing. The timing of these events is based on input from management. For each future equity value scenario, the rights and preferences of each stockholder class are considered in order to determine the appropriate allocation of value to common stock. The value of each share of common stock is then multiplied by a discount factor derived from the calculated discount rate and expected timing of the event (plus or minus a standard deviation of time). The value per share of common stock is then multiplied by an estimated probability for each of the possible events based on discussion with management. The calculated value per common share under each scenario is then discounted for a lack of marketability. A probability-weighted value per share of common stock is then determined. Under the PWERM, the value of the Company' s common stock is estimated based upon an analysis of values for the Company' s common stock assuming various possible future events for the Company including an initial public offering and acquisition scenarios.

The Company estimates the fair value of its stock options on the grant date, using the Black-Scholes option pricing model. The fair value of both employees and non-employee director options is being amortized on a straight-line basis over the requisite service period of the awards. The weighted average grant date fair value per share of options granted for the years ended December 31, 2009, 2010 and 2011 and for the nine months ended September 30, 2011 and 2012 (unaudited) was $0.83, $2.73, $3.78, $3.55 and $5.12, respectively. The fair value of these stock options was estimated using the following weighted average assumptions:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Expected dividend yield	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Risk-free interest rate	2.1 %	2.0 %	2.0 %	2.3 %	0.8 %
Expected volatility	46.3%	49.9%	50.3%	50.0 %	51.2 %
Expected life (in years)	5.6	5.6	5.6	5.9	5.6

Expected dividend yield: The Company has not paid and does not anticipate paying any dividends in the near future.

LipoScience, Inc.

Notes to Financial Statements (continued)

Risk -free interest rate: The Company determined the risk-free interest rate by using a weighted average assumption equivalent to the expected term based on the U.S. Treasury yield curve in effect as of the date of grant.

Expected volatility: The Company used an average historical stock price volatility based on an analysis of reported data for a peer group of comparable companies that have issued stock options with substantially similar terms, as the Company did not have any trading history for its common stock.

Expected term (in years): Expected term represents the period that the Company' s stock option grants are expected to be outstanding. The Company elected to utilize the "simplified" method to value stock option grants. Under this approach, the weighted-average expected life is presumed to be the average of the vesting term and the contractual term of the option.

Estimated forfeiture rate: Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from estimates. The Company estimates forfeitures based on its historical experience.

The Company recognized non-cash stock-based compensation expense to employees in its research and development, sales and marketing and general and administrative functions as follows:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Cost of revenues	$7,349	$20,491	$8,301	$4,791	$35,474
Research and development	135,589	45,026	155,326	113,215	359,080
Sales and marketing	152,619	137,058	216,738	155,993	198,428
General and administrative	284,838	447,151	270,838	216,324	288,486
Total:	$580,395	$649,726	$651,203	$490,323	$881,468

The following table summarizes information about stock options outstanding as of December 31, 2011:

	Total Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Life in Years	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Life in Years
$1.88 - $2.50	1,271,684	$2.47		1,250,553	$2.47	
$3.88 - $4.23	276,429	3.96		276,429	3.96	
$5.16	71,277	5.16		71,277	5.16	
$5.63	280,667	5.63		187,954	5.63	
$6.46	3,492	6.46		3,492	6.46	
$6.89	188,225	6.89		51,795	6.89	
$9.02	95,836	9.02		5,334	9.02	
$9.84	45,977	9.84		4,041	9.84	
$12.38	11,640	12.38		11,640	12.38	
$34.80	20,915	34.80		20,915	34.80	
	2,266,142	4.27	5.8	1,883,430	3.69	5.1

LipoScience, Inc.

Notes to Financial Statements (continued)

The following table summarizes information about stock options outstanding as of September 30, 2012 (unaudited):

	Total Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Life in Years	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Life in Years
$1.88 - $2.50	1,184,222	$2.46		1,181,421	$2.46	
$3.88 - $4.23	262,337	3.93		262,337	3.93	
$5.16	69,576	5.16		69,576	5.16	
$5.63	249,861	5.63		202,830	5.63	
$6.89	175,170	6.89		101,006	6.89	
$9.02	93,241	9.02		25,442	9.02	
$9.84	44,016	9.84		21,577	9.84	
$11.12	29,100	11.12		9,295	11.12	
$11.45	256,625	11.45		83,448	11.45	
$12.38	11,640	12.38		11,640	12.38	
	2,375,788	$4.88	5.6	1,968,572	3.95	4.9

The aggregate intrinsic value of options outstanding for the years ended December 31, 2009, 2010 and 2011 was $5.8 million, $9.4 million and $11.4 million, respectively, and was $13.2 million and $14.9 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

The aggregate intrinsic value of options exercisable for the years ended December 31, 2009, 2010 and 2011 was $5.0 million, $8.6 million and $10.6 million, respectively, and was $12.0 million and $14.1 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

The aggregate intrinsic value of options exercised for the years ended December 31, 2009, 2010 and 2011 was $0, $0.1 million and $0.4 million, respectively, and was $0.4 million and $82,000 for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

For the years ended December 31, 2009, 2010 and 2011, the Company recorded stock-based compensation expense in the amount of $0.6 million, $0.6 million and $0.7 million, respectively, and $0.5 million and $0.9 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively. Net cash provided by operating and financing activities was unchanged by stock option activity for the years ended December 31, 2009, 2010 and 2011 and for the nine months ended September 30, 2011 and 2012 (unaudited), as there were no excess tax benefits from stock-based compensation plans.

A summary of the activity of the Company' s unvested stock options is as follows:

	Options	Weighted Average Grant Date Fair Value
Balance at December 31, 2010	303,191	2.39
Granted	354,579	3.77
Vested	(218,190)	2.45
Forfeited	(56,460)	2.82

Balance at December 31, 2011	383,120	3.51
Granted (unaudited)	295,021	5.11
Vested (unaudited)	(221,894)	4.08
Forfeited (unaudited)	(48,633)	3.46
Balance at September 30, 2012 (unaudited)	407,614	4.35

The total fair value of shares vested for the years ended December 31, 2009, 2010 and 2011 was $0.5 million, $0.5 million and $0.5 million, respectively, and was $0.4 million and $0.9 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

12. Related-Party Transactions

The Company licenses certain technology from North Carolina State University (North Carolina State) (see Note 14) based on certain prior research performed at North Carolina State by James Otvos, Ph.D. Dr. Otvos is a founder, Chief Scientific Officer and a principal stockholder of the Company. Dr. Otvos is an Adjunct Professor of Biochemistry at North Carolina State. As of December 31, 2010 and 2011, the accrued license royalties due to North Carolina State totaled approximately $0.1 million and $5,000, respectively. There were no accrued royalties as of September 30, 2012 (unaudited).

13. Income Taxes

The components for the income tax expense (benefit) are as follows for the years ended December 31:

	2009	2010	2011
Current income tax expense (benefit)			
Federal	$1,800	$(17,631)	$–
State	–	1,500	–
Deferred income tax expense (benefit)			
Federal	–	–	–
State	–	–	–
Income tax expense (benefit)	$1,800	$(16,131)	$–

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company' s deferred tax assets are as follows at December 31:

	2010	2011
Deferred tax assets:		
Net operating loss carryforwards	$13,021,800	$12,864,500
Research and development credits	1,729,500	1,978,300
Stock-based compensation	1,672,900	1,769,900
Allowance for uncollectible accounts receivable	549,800	537,000
Depreciation and amortization	335,500	234,200
Other long-term liabilities	–	–
Other	168,400	219,400
Total deferred tax assets	17,477,900	17,603,300
Valuation allowance	(17,477,900)	(17,603,300)
Net deferred tax asset	$–	$–

At December 31, 2010 and 2011, the Company had federal net operating loss carryforwards of approximately $34.3 million and $34.0 million, respectively, state net economic loss carryforwards of approximately $30.2 million and $31.1 million, respectively, and research and development credit carryforwards

of approximately $1.7 million and $2.0 million, respectively. The federal and state net operating loss carryforwards begin to expire in 2012 and 2014, respectively, and the research and development credit carryforwards begin to expire in 2012. The Company' s federal and state net operating loss carryforwards include $0.3 million of excess tax benefits related to deductions from the exercise of nonqualified stock options. The tax benefit of these deductions has not been recognized in deferred tax assets. If utilized, the benefits from these deductions will be recorded as adjustments to income tax expense and additional paid-in capital. For financial reporting purposes, a valuation allowance has been recognized to offset the deferred tax assets related to the carryforwards. The total increase in valuation allowance of $0.1 million was allocable to current operating activities. The utilization of the loss carryforwards to reduce future income taxes will depend on the Company' s ability to generate sufficient taxable income prior to the expiration of the loss carryforwards. In addition, the maximum annual use of net operating loss and research credit carryforwards is limited in certain situations where changes occur in stock ownership. The recognized tax benefit related to net operating loss carryforwards was approximately $14,000, $1.0 million and $37,600 for the years ended December 31, 2009, 2010 and 2011, respectively.

The Small Business Jobs Act of 2010 was enacted on September 27, 2010. The new law allows research and development tax credits to offset both federal regular tax and federal alternative minimum tax of eligible small businesses. The provision is effective for any research and development credits generated during the tax year ended December 31, 2010 and to any carryback of such credits. The Company has determined that it qualifies as an eligible small business under these provisions and was able to offset its federal alternative minimum tax liability of approximately $0.1 million for the tax year ended December 31, 2010. The Company also carried back excess tax credits generated to the year ended December 31, 2009 to eliminate federal alternative minimum tax paid of approximately $19,000.

Taxes computed at the statutory federal income tax rate of 34% are reconciled to the provision for (benefit from) income taxes for the years ended December 31, 2009, 2010 and 2011 are as follows:

	2009		2010		2011	
	Amount	% of Pretax Earnings	Amount	% of Pretax Earnings	Amount	% of Pretax Earnings
United States federal tax at statutory rate	$88,279	34.0 %	$1,460,603	34.0 %	$(186,320)	34.0 %
State taxes (net of federal benefit)	11,814	4.6	195,463	4.6	(24,934)	4.5
Research and development credits	(219,041)	(84.4)	(380,892)	(8.9)	(385,557)	70.4
Meals & entertainment	146,466	56.4	210,130	4.9	272,151	(49.7)
Stock based compensation	156,768	60.4	151,736	3.5	151,351	(27.6)
Change in preferred stock warrant liability	78,355	30.2	(150,652)	(3.5)	(97,008)	17.7
Other nondeductible expenses	13,137	5.1	154,955	3.6	97,929	(17.8)
Provision to return true-ups	41,393	15.9	58,293	1.4	–	–
Increase in unrecognized tax benefits	43,800	16.9	50,300	1.2	50,893	(9.3)
Change in valuation allowance	(360,276)	(138.8)	(1,758,600)	(40.9)	125,463	(22.9)
Other	1,105	0.4	(7,467)	(0.3)	(3,968)	0.7
Provision for (benefit from) income taxes	$1,800	0.7 %	$(16,131)	(0.4)%	$–	– %

Effective January 1, 2007, the Company adopted the provisions of the FASB' s guidance on accounting for uncertainty in income taxes. These provisions provide a comprehensive model for the recognition, measurement

and disclosure in financial statements of uncertain income tax positions that a company has taken or expects to take on a tax return. Under these provisions, a company can recognize the benefit of an income tax position only if it is more likely than not (greater than 50%) that the tax position will be sustained upon tax examination, based solely on the technical merits of the tax position. Otherwise, no benefit can be recognized. Assessing an uncertain tax position begins with the initial determination of the sustainability of the position and is measured at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed. Additionally, companies are required to accrue interest and related penalties, if applicable, on all tax exposures for which reserves have been established consistent with jurisdictional tax laws. The cumulative effect of this adoption is recorded as an adjustment to the opening balance of its retained deficit on the adoption date.

As a result of implementing these provisions on January 1, 2007, the Company reduced its deferred tax assets by approximately $0.1 million and reduced its valuation allowance against the deferred tax assets by the same amount. Accordingly, the Company did not record a contingent tax liability at that time, and to date, the Company has not recorded a contingent tax liability as a result of the implementation of these provisions. At the adoption date of January 1, 2007 and as of December 31, 2011, the Company had no accrued interest or penalties related to the tax contingencies. The Company' s policy for recording interest and penalties is to record them as a component of provision for income taxes.

The Company had gross unrecognized tax benefits of approximately $0.3 million as of January 1, 2011. As of December 31, 2011, the total gross unrecognized tax benefits were approximately $0.4 million and of this total, none would reduce the Company' s effective tax rate if recognized. The Company does not anticipate a significant change in total unrecognized tax benefits or the Company' s effective tax rate due to the settlement of audits or the expiration of statutes of limitations within the next twelve months. Furthermore, the Company does not expect any cash settlement with the taxing authorities as a result of these unrecognized tax benefits as the Company has sufficient unutilized carryforward attributes to offset the tax impact of these adjustments.

The Company has analyzed its filing positions in all significant federal, state and foreign jurisdictions where it is required to file income tax returns, as well as open tax years in these jurisdictions. With few exceptions, the Company is no longer subject to US Federal and state and local tax examinations by tax authorities for years prior to 2008, although carryforward attributes that were generated prior to 2008 may still be adjusted upon examination by the IRS if they either have been or will be used in a future period. No income tax returns are currently under examination by taxing authorities.

The following is a tabular reconciliation of the Company' s change in gross unrecognized tax positions:

	Year Ended December 31,		
	2009	2010	2011
Beginning balance	$233,400	$277,200	$327,500
Gross decreases for tax positions related to current periods	–	–	(8,800)
Gross increases for tax positions related to current periods	43,800	50,300	50,900
Ending balance	$277,200	$327,500	$369,600

14. Intellectual Property - License Agreements

On May 12, 1997, the Company entered into a license agreement with North Carolina State. Under the terms of the agreement, North Carolina State granted the Company an exclusive, worldwide license, including

patent rights, to technology related to measuring lipoprotein levels using NMR spectroscopy. The Company paid an initial license fee and made a commitment to fund future collaborative research for $25,000. The Company is required to pay certain royalties based on net sales, subject to a minimum annual royalty. The agreement also requires the Company to commercialize the patent rights. The agreement shall remain in effect until the expiration of the last-to-expire patent covered by the agreement. Dr. Otvos, the Chief Scientific Officer of the Company, is an Adjunct Professor of Biochemistry at North Carolina State (see Note 12).

On June 15, 1997, the Company entered into a license agreement with Siemens Medical Systems, Inc. (Siemens). Under the terms of the agreement, Siemens granted to the Company an exclusive license to certain technology provided by patent rights. The license is based on an initial patent issued in June 1990 and subsequent patents. The Company is required to pay royalties based on net sales of each product covered by the patent, including the *NMR LipoProfile* test, subject to a minimum annual royalty, including sub-licensee sales. The agreement shall remain in effect until the expiration of the last-to-expire patent covered by the agreement.

Both licenses required reimbursement of patent costs and a commitment to fund future patent protection and maintenance costs. Royalty expense under these license agreements for the years ended December 31, 2009, 2010 and 2011 was $0.1 million, $0.3 million and $0.3 million, respectively, and was $0.3 million and $2,500 for the nine months ended September 30, 2011 and 2012 (unaudited), respectively, which is classified within cost of revenues in the accompanying statements of operations.

15. Employee Benefit Plan

The Company has adopted a defined contribution plan (the Employee Benefit Plan or the Plan) which qualifies under Section 401(k) of the Internal Revenue Code. All employees of the Company who have attained 21 years of age are eligible for participation in the Plan after ninety days of employment. The effective date of the Employee Benefit Plan is September 1, 1998.

Under the Plan, participating employees may defer up to the Internal Revenue Service annual contribution limit. Effective January 1, 2002, the Employee Benefit Plan includes an employer match of 25% of the first 6% an eligible participant contributes to the Plan. On July 1, 2012 (unaudited), the Company increased its employer match from 25% to 50%. During the years ended December 31, 2009, 2010 and 2011, the Company paid $0.1 million, $0.2 million and $0.2 million, respectively, and the Company paid $0.2 million and $0.3 million during the nine months ended September 30, 2011 and 2012 (unaudited), respectively, in employer match contributions to the Plan.

16. Commitments and Contingencies

Leases

The Company leases an aggregate of approximately 83,000 square feet of office and laboratory space under an escalating lease agreement that expires September 30, 2022. In connection with the lease, the Company obtained a $1.5 million letter of credit which is secured by restricted cash (see Note 6).

The Company also leases office equipment and software license through operating leases.

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Notes to Financial Statements (continued)

Future minimum lease payments required under the non-cancelable operating leases in effect as of September 30, 2012 (unaudited) are as follows:

	Operating Leases
2012	$154,058
2013	1,300,439
2014	1,289,510
2015	1,206,177
2016	1,242,603
Thereafter	7,586,831
Total minimum lease payments	$12,779,618

Rent expense is calculated on a straight-line basis over the term of the lease. Rent expense recognized under operating leases totaled $1.2 million for each of the years ended December 31, 2009, 2010 and 2011, and $0.9 million for each of the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

Property and equipment includes the following amounts financed under capital leases as of:

	December 31,		
	2010	2011	September 30, 2012 (unaudited)
Office equipment	$181,936	$181,936	$ 181,936
Less accumulated depreciation	(171,828)	(181,936)	(181,936)
Property and equipment under capital leases, net	$10,108	$–	$ –

Purchase Obligations

The Company has outstanding purchase obligations, relating to the purchase of hardware components from third-party manufacturers for the *Vantera* system, in the amount of $0.4 million as of September 30, 2012 (unaudited).

Letters of Credit

The Company has an outstanding letter of credit in the amount of $0.4 million that serves as security with one of its vendors.

Legal Contingencies

The Company is subject to claims and assessments from time to time in the ordinary course of business. The Company' s management does not believe that any such matters, individually or in the aggregate, will have a material adverse effect on the Company' s business, financial condition, results of operations or cash flows.

Indemnification

In the normal course of business, the Company enters into contracts and agreements that contain a variety of representations and warranties and provide for general indemnification. The Company' s exposure under these agreements is unknown because it involves claims that may be made against the Company in the future, but that have not yet been made. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. However, the Company may record charges in the future as a result of these indemnification obligations.

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Notes to Financial Statements (continued)

In accordance with its Certificate of Incorporation and bylaws, the Company has indemnification obligations to its officers and directors for certain events or occurrences, subject to certain limits, while they are serving at the Company' s request in such capacity. There have been no claims to date, and the Company has director and officer insurance that enables it to recover a portion of any amounts paid for future potential claims.

In addition to the indemnification provided for in its certificate of incorporation and bylaws, the Company has also entered into separate indemnification agreements with each of its directors, which agreements provide such directors with broad indemnification rights under certain circumstances.

17. Quarterly Results of Operations (unaudited)

The following is a summary of the unaudited quarterly results of operations:

	Quarterly Period Ended			
	March 31, 2010	June 30, 2010	September 30, 2010	December 31, 2010
Revenues	$9,369,291	$9,996,871	$9,811,406	$10,190,624
Gross profit	7,326,277	7,948,185	7,762,365	8,192,319
Income from operations	393,375	721,392	2,825,597	135,233
Other (expense) income	(33,187)	59,979	50,439	143,062
Net income	360,188	781,371	2,892,167	278,295
Accrual of dividends on redeemable convertible preferred stock	(260,000)	(260,000)	(260,000)	(260,000)
Undistributed earnings allocated to preferred stockholders[1]	(81,251)	(423,678)	(2,137,018)	(14,846)
Net income attributable to common stockholders - basic[1]	18,937	97,693	495,149	3,449
Undistributed earnings re-allocated to common stockholders[1]	8,853	45,934	232,938	1,712
Net income attributable to common stockholders - diluted[1]	27,790	143,627	728,087	5,175
Net income per share attributable to common stockholders - basic[1]	0.01	0.06	0.31	0.00
Net income per share attributable to common stockholders - diluted[1]	0.01	0.05	0.28	0.00

	Quarterly Period Ended			
	March 31, 2011	June 30, 2011	September 30, 2011	December 31, 2011
Revenues	$10,541,817	$11,162,499	$11,623,195	$12,479,559
Gross profit	8,386,636	8,992,945	9,581,165	10,317,307
(Loss) income from operations	(406,783)	(348,344)	317,242	52,408
Other (expense) income	(77,813)	24,005	(76,200)	(32,515)
Net (loss) income	(484,596)	(324,339)	241,042	19,893
Accrual of dividends on redeemable convertible preferred stock	(260,000)	(260,000)	(92,602)	–
Undistributed earnings allocated to preferred stockholders[1]	–	–	(119,682)	(16,048)
Net (loss) income attributable to common stockholders - basic[1]	(744,596)	(584,339)	28,758	3,845
Undistributed earnings re-allocated to common stockholders[1]	–	–	13,051	2,083
Net (loss) income attributable to common stockholders - diluted[1]	(744,596)	(584,339)	41,808	5,928
Net (loss) income per share attributable to common stockholders - basic[1]	(0.45)	(0.35)	(0.02)	0.00

Net (loss) income per share attributable to common stockholders – diluted[1]	(0.45)	(0.35)	(0.03)	0.00

LipoScience, Inc.

Notes to Financial Statements (continued)

	Quarterly Period Ended		
	March 31, 2012	June 30, 2012	September 30, 2012
Revenues	$13,783,409	$13,894,046	$13,563,203
Gross profit	11,465,679	11,215,929	10,937,745
Income from operations	1,503,898	400,503	(212,928)
Other (expense) income	(233,806)	(132,770)	(267,785)
Net income	1,270,092	267,733	(480,713)
Income allocable to preferred stockholders	(1,021,344)	(215,245)	–
Net income attributable to common stockholders - basic	248,748	52,488	(480,713)
Undistributed earnings re-allocated to common stockholders	132,751	27,153	–
Net income attributable to common stockholders - diluted	381,499	79,641	(480,713)
Net income per share attributable to common stockholders - basic	0.15	0.03	(0.28)
Net income per share attributable to common stockholders - diluted	0.13	0.03	(0.28)

(1) These amounts are computed independently for each of the periods presented above and, therefore, may not add up to the total for the year presented in the statement of operations.

18. Subsequent Events

New Credit Facility

In December 2012, the Company entered into a new credit facility with two financial institutions and repaid the outstanding balance under a previous facility. The new facility consists of $16.0 million in term loans and a revolving line of credit with up to $6.0 million in borrowing capacity, subject to certain limitations relating to the Company' s eligible accounts receivable. During December 2012, the Company borrowed $5.0 million under the revolving line of credit.

The term loans carry interest at a fixed annual rate of 9.5% and are payable in monthly installments of interest only through January 2014 and then principal and interest thereafter in monthly installments through July 2016. Advances under the revolving line of credit, which matures in December 2013, carry a variable interest rate equal to the greater of 6.25% or the institution' s prime rate plus 3.0%. Borrowings under the credit facility are secured by substantially all of the Company' s tangible assets. The covenants set forth in the loan and security agreement require, among other things, that the Company maintain a specified liquidity ratio, measured monthly, that begins at 1.25 and is reduced to 1.0 over the term of the agreement. The Company is also required to achieve minimum three-month trailing revenue levels during the term of the agreement.

In connection with the new credit facility, the Company issued warrants to these financial institutions to purchase an aggregate of 73,564 shares of Series E redeemable convertible preferred stock at an exercise price of $4.35 per share.

Amendment to Certificate of Incorporation

On January 8, 2013, the Company amended its certificate of incorporation to remove the $132.0 million pre-money valuation condition from the definition of a Qualified Public Offering.

Reverse Stock Split

On January 4, 2013, the Company' s Board of Directors approved a 0.485-for-1 reverse stock split of the Company' s outstanding common stock. The reverse stock split was effected on January 10, 2013, which resulted in an adjustment to the preferred stock conversion price to reflect a proportional decrease in the number of shares of common stock to be issued upon conversion. The

accompanying financial statements and notes to financial statements give retroactive effect to the reverse stock split for all periods presented.

Table of Contents

Pioneering Clinical NMR Diagnostics

Vantera®

Vantera, our next-generation automated clinical NMR platform, will allow ***decentralized access*** to LipoScience's *NMR LipoProfile®* test and future personalized diagnostic tests we plan to develop for routine use in the clinical chemistry laboratory.

Vantera enables ***simultaneous measurement of multiple metabolites*** in a rapid and efficient manner.

Future NMR-based diagnostic tests are under development for assessing ***insulin resistance*** and the ***risk for developing Type 2 diabetes.***

Research is under way to further explore the use of NMR technology for the detection and management of certain cancers, gastrointestinal, inflammatory and neurologic diseases.

5,000,000 Shares

Common Stock

Prospectus

, 2013

Barclays
UBS Investment Bank
Piper Jaffray

Until , 2013, which is the date 25 days after the date of this prospectus, all dealers that buy, sell or trade our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealer' s obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of the common stock being registered. All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee and the NASDAQ Global Market initial listing fee.

	Amount to be Paid
SEC registration fee	$10,014
FINRA filing fee	9,125
NASDAQ Global Market initial listing fee	125,000
Printing and engraving	300,000
Legal fees and expenses	1,500,000
Accounting fees and expenses	1,500,000
Transfer agent and registrar fees	2,500
Miscellaneous fees and expenses	53,361
Total	$3,500,000

Item 14. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, our amended and restated certificate of incorporation and bylaws provide that: (i) we are required to indemnify our directors to the fullest extent permitted by the Delaware General Corporation Law; (ii) we may, in our discretion, indemnify our officers, employees and agents as set forth in the Delaware General Corporation Law; (iii) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors in connection with certain legal proceedings; (iv) the rights conferred in the bylaws are not exclusive; and (v) we are authorized to enter into indemnification agreements with our directors, officers, employees and agents.

We have entered into agreements with our directors that require us to indemnify such persons against expenses, judgments, fines, settlements and other amounts that any such person becomes legally obligated to pay (including with respect to a derivative action) in connection with any proceeding, whether actual or threatened, to which such person may be made a party by reason of the fact that such person is or was a director or officer of us or any of our affiliates, provided such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. At present, no litigation or proceeding is pending that involves any of our directors or officers regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

In addition, the underwriting agreement filed as Exhibit 1.1 to this Registration Statement provides for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act, or otherwise. Our second amended and restated investor rights agreement with certain investors also provides for cross-indemnification in connection with the registration of the our common stock on behalf of such investors.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities sold by us since January 1, 2010 through the date of the prospectus filed as part of this registration statement.

1) From January 1, 2010 through the date of the prospectus filed as part of this registration statement, we have granted options under our 2007 Stock Incentive Plan to purchase an aggregate of 1,105,472 shares of our common stock to a total of approximately 195 employees, consultants and directors, having exercise prices ranging from $4.23 to $12.81 per share. Of these, options to purchase an aggregate of 186,752 shares have been cancelled without being exercised and 915,878 remain outstanding. During the period from January 1, 2010 through the date of the prospectus filed as part of this registration statement, an aggregate of 434,935 shares were issued upon the exercise of stock options, at a weighted-average exercise price of $2.45 per share, for aggregate cash proceeds of $372,680.

2) In March 2011, we issued warrants to purchase an aggregate of 88,793 shares of our Series F redeemable convertible preferred stock to one accredited investor. The warrants were issued in connection with the amendment of a credit facility with a commercial lender.

3) From February 2010 through November 2011, we issued an aggregate of 306,146 shares of our Series E redeemable convertible preferred stock to 12 investors upon the exercise of warrants at an exercise price of $4.35 per share.

(4) In December 2012, we issued warrants to purchase an aggregate of 73,564 shares of our Series E redeemable convertible preferred stock to two accredited investors. The warrants were issued in connection with our entering into a credit facility with commercial lenders.

(5) In December 2012, we issued 17,941 shares of our Series F redeemable convertible preferred stock to one accredited investor upon the net exercise of a warrant with an exercise price of $4.35 per share.

The offers, sales and issuances of the securities described in paragraph (1) were exempt from registration under the Securities Act under Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were our employees, directors or consultants and received the securities under our stock option plans. Appropriate legends

were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment or business relationships, to information about us.

The offers, sales, and issuances of the securities described in paragraphs (2) through (4) were exempt from registration under the Securities Act under Section 4(2) of the Securities Act as transactions by an issuer not involving a public offering. The recipients represented to us that they acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions.

The issuance of the securities described in paragraph (5) was exempt from registration under Section 3(a)(9) of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

Exhibit Number	Description of Document
1.1	Form of Underwriting Agreement.
3.1#	Second Amended and Restated Certificate of Incorporation, as amended through March 30, 2011.
3.1.1	Certificate of Amendment, effective as of January 8, 2013.
3.2	Certificate of Amendment, effective as of January 10, 2013.
3.3	Form of Amended and Restated Certificate of Incorporation to be effective upon completion of this offering.
3.4#	Bylaws, as amended to date and as currently in effect.
3.5#	Form of Amended and Restated Bylaws to be effective upon completion of this offering.
4.1	Reference is made to exhibits 3.1 through 3.5.
4.2	Specimen Common Stock Certificate.
5.1	Opinion of Cooley LLP as to legality.
10.1	Loan and Security Agreement, dated as of December 20, 2012, by and among the Registrant, Oxford Finance LLC and Square 1 Bank.
10.2	Warrant to purchase Series E preferred stock issued to Square 1 Bank, dated December 20, 2012.
10.3.1	Warrant No. 1 to purchase Series E preferred stock issued to Oxford Finance LLC, dated December 20, 2012.
10.3.2	Warrant No. 2 to purchase Series E preferred stock issued to Oxford Finance LLC, dated December 20, 2012.
10.4#	Warrant to purchase Series F preferred stock issued to Silicon Valley Bank, dated December 13, 2006.
10.5#	Warrant to purchase Series F preferred stock issued to Square 1 Bank, dated February 7, 2008.
10.6#	Warrant to purchase Series F preferred stock issued to Square 1 Bank, dated March 31, 2011.
10.7#	Second Amended and Restated Investor Rights Agreement, dated as of August 2, 2006 and as amended to date, by and among the Registrant and certain of its stockholders.
10.8#	Standard Lease, dated as of October 4, 2001, as amended on March 5, 2002 and August 28, 2002, by and between the Registrant and Parker-Raleigh Development XXX, LLC.

Exhibit Number	Description of Document
10.8.1#	Lease Amendment No. 3, dated as of November 29, 2011, by and between the Registrant and Raleigh Portfolio JH, LLC, as successor to Parker-Raleigh Development XXX, LLC.
10.9*#	Supply Agreement, dated as of July 16, 2012, by and between the Registrant and Agilent Technologies, Inc.
10.10*#	Production Agreement, dated as of June 26, 2009, by and between the Registrant and KMC Systems, Inc.
10.11*#	License Agreement, dated as of May 9, 1997, as amended on January 10, 2001 and October 11, 2010, by and between the Registrant and North Carolina State University.
10.12+#	1997 Stock Option Plan, as amended to date.
10.13+#	Form of Incentive Stock Option Agreement under 1997 Stock Option Plan.
10.14+#	Form of Incentive Stock Option Agreement under 1997 Stock Option Plan with modified change of control provisions.
10.15+#	Form of Nonqualified Stock Option Agreement under 1997 Stock Option Plan.
10.16+#	2007 Stock Incentive Plan, as amended to date.
10.17+#	Form of Incentive Stock Option Agreement under 2007 Stock Incentive Plan.
10.18+#	Form of Nonqualified Stock Option Agreement under 2007 Stock Incentive Plan.
10.19+#	Form of Nonqualified Stock Option Agreement under 2007 Stock Incentive Plan for initial grants to directors.
10.20+#	Form of Nonqualified Stock Option Agreement under 2007 Stock Incentive Plan for annual grants to directors.
10.21+#	Form of Nonqualified Stock Option Agreement under 2007 Stock Incentive Plan for grants to committee chairpersons.
10.22+#	Form of Restricted Stock Purchase Agreement under 2007 Stock Incentive Plan.
10.23+#	2012 Equity Incentive Plan.
10.24+#	Form of Stock Option Grant Notice and Stock Option Agreement under 2012 Equity Incentive Plan.
10.25+#	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under 2012 Equity Incentive Plan.
10.26+#	Non-Employee Director Compensation Plan, as amended to date and as currently in effect.
10.26.1#	Non-Employee Director Compensation Plan to be in effect upon the completion of this offering.
10.27+#	Form of Indemnification Agreement between the Registrant and certain of its directors.
10.28+#	Form of Indemnification Agreement between the Registrant and certain of its directors affiliated with stockholders.
10.29+#	2012 Employee Stock Purchase Plan.
10.30+#	Form of Amended and Restated Employment Agreement with Richard O. Brajer to be in effect upon completion of this offering.
10.31+#	Form of Amended and Restated Employment Agreement with Lucy G. Martindale to be in effect upon completion of this offering.

Exhibit Number	Description of Document
10.32+	Form of Amended and Restated Employment Agreement with Robert M. Honigberg to be in effect upon completion of this offering.
10.33+#	Form of Amended and Restated Employment Agreement with Timothy J. Fischer to be in effect upon completion of this offering.
10.34+#	Form of Amended and Restated Employment Agreement with Thomas S. Clement to be in effect upon completion of this offering.
10.35*#	Agreement, dated as of September 28, 2012, by and between the Registrant and Laboratory Corporation of America Holdings.
10.36+#	Executive Severance Benefit Plan.
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney. See Page II-6 to the Registration Statement on Form S-1 (File No. 333-175102) filed with the SEC on June 23, 2011.

Previously filed.
\+ Indicates management contract or compensatory plan.
* Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and have been separately filed with the Securities and Exchange Commission.

(b) Financial Statement Schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

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.

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 foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, 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, 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.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Amendment No. 7 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Raleigh, State of North Carolina, on the 10th day of January, 2013.

LIPOSCIENCE, INC.

By: /S/ RICHARD O. BRAJER
Richard O. Brajer
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Amendment No. 7 to Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/S/ RICHARD O. BRAJER Richard O. Brajer	President, Chief Executive Officer and Director *(Principal Executive Officer)*	January 10, 2013
/S/ LUCY G. MARTINDALE Lucy G. Martindale	Executive Vice President and Chief Financial Officer *(Principal Accounting and Financial Officer)*	January 10, 2013
* Buzz Benson	Chairman of the Board of Directors	January 10, 2013
* Charles A. Sanders, M.D.	Director and Chairman Emeritus	January 10, 2013
* Roderick A. Young	Director	January 10, 2013
* Woodrow A. Myers, Jr., M.D.	Director	January 10, 2013
* Robert J. Greczyn, Jr.	Director	January 10, 2013
* John H. Landon	Director	January 10, 2013
* Daniel J. Levangie	Director	January 10, 2013
* Christopher W. Kersey	Director	January 10, 2013

*By: /S/ TIMOTHY J. WILLIAMS

Attorney-in-fact

Exhibit 1.1

5,000,000 Shares

LIPOSCIENCE, INC.

Common Stock

UNDERWRITING AGREEMENT

[ ], 2013

BARCLAYS CAPITAL INC.
UBS SECURITIES LLC
PIPER JAFFRAY & CO.
As Representatives of the several
Underwriters named in Schedule I attached hereto

Barclays Capital Inc.
745 Seventh Avenue
New York, New York 10019

UBS Securities LLC
299 Park Avenue
New York, New York 10171

Piper Jaffray & Co.
345 Park Avenue, 12th Floor
New York, New York 10154

Ladies and Gentlemen:

LipoScience, Inc., a Delaware corporation (the "***Company***"), proposes to sell 5,000,000 shares (the "***Firm Stock***") of the Company' s common stock, par value $0.001 per share (the "***Common Stock***"). In addition, the Company proposes to grant to the underwriters (the "***Underwriters***") named in Schedule I attached to this agreement (this "***Agreement***") an option to purchase up to 750,000 additional shares of the Common Stock on the terms set forth in Section 2 (the "***Option Stock***"). The Firm Stock and the Option Stock, if purchased, are hereinafter collectively called the "***Stock***". This Agreement is to confirm the agreement concerning the purchase of the Stock from the Company by the Underwriters.

1. *Representations, Warranties and Agreements of the Company*. The Company represents, warrants and agrees that:

(a) A registration statement on Form S-1 (File No. 333-175012) relating to the Stock has (i) been prepared by the Company in conformity with the requirements of the Securities Act of 1933, as amended (the "***Securities Act***"), and the rules and regulations of the Securities and Exchange Commission (the "***Commission***") thereunder; (ii) been filed with the Commission under the Securities Act; and (iii) become effective under the Securities Act. Copies of such registration statement and any amendment thereto have been delivered by the Company to you as the representatives (the "***Representatives***") of the Underwriters. As used in this Agreement:

(i) "***Applicable Time***" means [ ] p.m. (New York City time) [ ], 2013;

(ii) "***Effective Date***" means the date and time as of which such registration statement was declared effective by the Commission;

(iii) "***Emerging Growth Company***" means an "emerging growth company" as defined in Section 2(a) of the Securities Act;

(iv) "***Issuer Free Writing Prospectus***" means each "free writing prospectus" (as defined in Rule 405 under the Securities Act) prepared by or on behalf of the Company or used or referred to by the Company in connection with the offering of the Stock;

(v) "***Preliminary Prospectus***" means any preliminary prospectus relating to the Stock included in such registration statement or filed with the Commission pursuant to Rule 424(b) under the Securities Act;

(vi) "***Pricing Disclosure Package***" means, as of the Applicable Time, the most recent Preliminary Prospectus, together with the information included in Schedule III hereto and each Issuer Free Writing Prospectus filed or used by the Company on or before the Applicable Time, other than a road show that is an Issuer Free Writing Prospectus but is not required to be filed under Rule 433 under the Securities Act;

(vii) "***Prospectus***" means the final prospectus relating to the Stock, as filed with the Commission pursuant to Rule 424(b) under the Securities Act;

(viii) "***Registration Statement***" means such registration statement, as amended as of the Effective Date, including any Preliminary Prospectus or the Prospectus, all exhibits to such registration statement and including the information deemed by virtue of Rule 430A under the Securities Act to be part of such registration statement as of the Effective Date; and

(ix) "***Testing-the-Waters Communication***" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(x) "***Written Testing-the-Waters Communication***" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act.

Any reference to the "***most recent Preliminary Prospectus***" shall be deemed to refer to the latest Preliminary Prospectus included in the Registration Statement or filed pursuant to Rule 424(b) under the Securities Act prior to or on the date hereof.

The Commission has not issued any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus or suspending the effectiveness of the Registration Statement, and no proceeding or examination for such purpose has been instituted or, to the knowledge of the Company, threatened by the Commission.

(b) The Company was not at the time of initial filing of the Registration Statement and at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Stock, is not on the date hereof and will not be on the applicable Delivery Date, an "ineligible issuer" (as defined in Rule 405 under the Securities Act).

(c) The Registration Statement conformed and will conform in all material respects on the Effective Date and on the applicable Delivery Date, and any amendment to the Registration Statement filed after the date hereof will conform in all material respects when filed, to the requirements of the Securities Act and the rules and regulations thereunder. The most recent Preliminary Prospectus conformed, and the Prospectus will conform, in all material respects when filed with the Commission pursuant to Rule 424(b) under the Securities Act and on the applicable Delivery Date to the requirements of the Securities Act and the rules and regulations thereunder.

(d) The Registration Statement did not, as of the Effective Date, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Registration Statement in reliance upon and in conformity with written information furnished to the Company through the Representatives by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(e) The Prospectus will not, as of its date or as of the applicable Delivery Date, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Prospectus in reliance upon and in conformity with written information furnished to the Company through the Representatives by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(f) The Pricing Disclosure Package did not, as of the Applicable Time, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Pricing Disclosure Package in reliance upon and in conformity with written information furnished to the Company through the Representatives by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(g) The Pricing Disclosure Package, (i) when taken together with each Issuer Free Writing Prospectus listed in Schedule IV hereto and (ii) when taken together with any individual Written Testing-the-Waters Communication listed on Schedule VI hereto, did not, as of the Applicable Time, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Pricing Disclosure Package (or any Issuer Free Writing Prospectus listed in Schedule IV hereto or Written Testing-the-Waters Communication listed on Schedule VI hereto) in reliance upon and in conformity with written information furnished to the Company through the Representatives by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(h) Each Issuer Free Writing Prospectus and each Testing-the-Waters Communication conformed or will conform in all material respects to the requirements of the Securities Act and the rules and regulations thereunder on the date of first use or the date when made, as the case may be, and the Company has complied with all prospectus delivery and any filing requirements applicable to such Issuer Free Writing Prospectus or Testing-the-Waters Communication pursuant to the Securities Act and rules and regulations thereunder. The Company has not made any offer relating to the Stock that would constitute an Issuer Free Writing Prospectus or any communication relating to the Stock that would constitute a Testing-the-Waters Communication without the prior written consent of the Representatives, which shall be deemed to have been given for any Issuer Free Writing Prospectus listed on Schedule IV or Schedule V hereto and any Written Testing-the-Waters Communication listed on Schedule VI hereto. The Company has retained in accordance with the Securities Act and the rules and regulations thereunder all Issuer Free Writing Prospectuses that were not required to be filed pursuant to the Securities Act and the rules and regulations thereunder. The Company has taken all actions necessary so that any "road show" (as defined in Rule 433 under the Securities Act) in connection with the offering of the Stock will not be required to be filed pursuant to the Securities Act and the rules and regulations thereunder.

(i) The Company has been duly organized, is validly existing and in good standing as a corporation or other business entity under the laws of its jurisdiction of organization and is duly qualified to do business and in good standing as a foreign corporation or other business entity in each jurisdiction in which its ownership or lease of property or the conduct of its businesses requires such qualification, except where the failure to be so qualified or in good standing would not, in the aggregate, reasonably be expected to have a material adverse effect on the condition (financial or otherwise), results of operations, stockholders' equity, properties, business or prospects of the Company (a "***Material Adverse Effect***"). The Company has all corporate power and authority necessary to own or hold its properties and to conduct the businesses in which it is engaged. The Company does not have any subsidiaries or otherwise own or control, directly or indirectly, any corporation, association or other entity

(j) The Company has an authorized capitalization as set forth in each of the most recent Preliminary Prospectus and the Prospectus as of the date or dates set forth therein, and all of the issued shares of capital stock of the Company have been duly authorized and validly issued, are fully paid and non-assessable, conform in all material respects to the description thereof contained in the most recent Preliminary Prospectus and were issued in compliance with federal and state securities laws and not in violation of any preemptive right, resale right, right of first refusal or similar right. All of the Company' s options, warrants and other rights to purchase or exchange any securities for shares of the Company' s capital stock have been duly authorized and validly issued, conform in all material respects to the description thereof contained in the most recent Preliminary Prospectus and were issued in compliance with federal and state securities laws.

(k) The shares of the Stock to be issued and sold by the Company to the Underwriters hereunder have been duly authorized and, upon payment and delivery in accordance with this Agreement, will be validly issued, fully paid and non-assessable, will conform in all material respects to the description thereof contained in the most recent Preliminary Prospectus, will be issued in compliance with federal and state securities laws and will be free of statutory and contractual preemptive rights, rights of first refusal and similar rights.

(l) The Company has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement. This Agreement has been duly and validly authorized, executed and delivered by the Company.

(m) The issue and sale of the Stock, the execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby and the application of the proceeds from the sale of the Stock as described under "Use of Proceeds" in the most recent Preliminary Prospectus will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, impose any lien, charge or encumbrance upon any property or assets of the Company, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement, license, lease or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject; (ii) result in any violation of the provisions of the charter or by-laws (or similar organizational documents) of the Company; or (iii) result in any violation of any statute or any judgment, order, decree, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its properties or assets, except, with respect to clauses (i) and (iii), conflicts, breaches, violations, liens, charges, encumbrances or defaults that would not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

(n) No consent, approval, authorization or order of, or filing, registration or qualification with, any court or governmental agency or body having jurisdiction over the Company or any of its properties or assets is required for the issue and sale of the Stock, the execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby and the application of the proceeds from the sale of the Stock as described under "Use of Proceeds" in the most recent Preliminary Prospectus, except for the registration of the Stock under the Securities Act and such consents, approvals, authorizations, orders, filings, registrations or qualifications as may be required under the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"), and applicable state or foreign securities laws in connection with the purchase and sale of the Stock by the Underwriters.

(o) The historical financial statements (including the related notes and supporting schedules) included in the most recent Preliminary Prospectus comply as to form in all material respects with the requirements of Regulation S-X under the Securities Act and present fairly in all material respects the financial condition, results of operations and cash flows of the entities purported to be shown thereby at the dates and for the periods indicated and have been prepared in conformity with accounting principles generally accepted in the United States applied on a consistent basis throughout the periods involved, except for the absence of year-end audit adjustments in the case of interim unaudited financial statements.

(p) Ernst & Young LLP, who have certified certain financial statements of the Company, whose report appears in the most recent Preliminary Prospectus and who have delivered the initial letter referred to in Section 7(h) hereof, are independent public accountants as required by the Securities Act and the rules and regulations thereunder.

(q) The Company maintains internal accounting controls sufficient to provide reasonable assurances regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management' s general or specific authorization, (ii) transactions are recorded as necessary to permit preparation of the Company' s financial statements in conformity with accounting principles generally accepted in the United States and to maintain accountability for its assets, (iii) access to the Company' s assets is permitted only in accordance with management' s general or specific authorization, and (iv) the recorded accountability for the Company' s assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. As of the date of the most recent balance sheet of the Company included in the most recent Preliminary Prospectus, there were no material weaknesses in the Company' s internal controls.

(r) (i) The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act), (ii) such disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management of the Company, including its principal executive officers and principal financial officers, as appropriate and (iii) such disclosure controls and procedures are effective in all material respects to perform the functions for which they were established.

(s) Since the date of the most recent balance sheet of the Company included in the most recent Preliminary Prospectus, (i) the Company has not been advised of or become aware of (A) any significant deficiencies in the design or operation of internal controls that could adversely affect the ability of the Company to record, process, summarize and report financial data, or any material weaknesses in internal controls, and (B) any fraud, whether or not material, that involves management or other employees who have a significant role in the internal controls of the Company; and (ii) there have been no significant changes in internal controls or in other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses.

(t) The section entitled "Management' s Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies" set forth in the most recent Preliminary Prospectus accurately and fully describes (i) the accounting policies that the Company believes are the most important in the portrayal of the Company' s financial condition and results of operations and that require management' s most difficult, subjective or complex judgments ("***Critical Accounting Policies***"); and (ii) the judgments and uncertainties affecting the application of Critical Accounting Policies.

(u) There is and has been no failure on the part of the Company and any of the Company' s directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith to the extent such Act, rules and regulations are or have been applicable to the Company or its directors or officers.

(v) Since the date of the latest audited financial statements included in the most recent Preliminary Prospectus, (a) the Company has not (i) sustained any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, (ii) issued or granted any securities, (iii) incurred any material liability or obligation, direct or contingent, other than liabilities and obligations that were incurred in the ordinary course of business, (iv) entered into any material transaction not in the ordinary course of business, or (v) declared or paid any dividend on its capital stock, and (b) there has not been any change in the capital stock, net current assets or short or long-term debt of the Company or any adverse change, or any development involving a prospective adverse change, in or affecting the condition (financial or otherwise), results of operations, stockholders' equity, properties, management, business or prospects of the Company, except, with respect to both clauses (a) and (b), such as has been disclosed in the most recent Preliminary Prospectus or, if not so disclosed, would not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

(w) The Company owns no real property. The Company has good and marketable title to all personal property owned by it free and clear of all liens, encumbrances and defects, except such liens, encumbrances and defects as are described in the most recent Preliminary Prospectus or such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company. All assets held under lease by the Company are held by it under valid, subsisting and enforceable leases, with such exceptions as do not materially interfere with the use made and proposed to be made of such assets by the Company.

(x) The Company and, to the Company' s knowledge, its directors, officers, employees, and agents (while acting in such capacity) are, and at all times prior hereto were, in material compliance with, all health care laws applicable to the Company or any of its products or activities, including, but not limited to, the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), the Anti-Inducement Law (42 U.S.C. § 1320a-7a(a)(5)), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the administrative False Claims Law (42 U.S.C. § 1320a-7b(a)), the Stark law (42 U.S.C. § 1395nn), the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. §§ 1320d et seq.) as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. §§ 17921 et seq.), the exclusion laws (42 U.S.C. § 1320a-7), the Federal Food Drug and Cosmetic Act (21 U.S.C. §§ 301 et seq.), the Controlled Substances Act (21 U.S.C. §§ 801 et seq.), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), the regulations promulgated pursuant to such laws, and any other state or federal law, accreditation standards, regulation, memorandum, opinion letter, or other issuance which imposes requirements on the manufacturing, development, testing, labeling, marketing or distribution of pharmaceutical products, kickbacks, patient or program charges, recordkeeping, claims process, documentation requirements, medical necessity, referrals, the hiring of employees or acquisition of services or supplies from those who have been excluded from government health care programs, quality, safety, privacy, security, licensure, accreditation or any other aspect of providing health care, clinical laboratory or diagnostics products or services (collectively, "***Health Care Laws***"). The Company has not received any notification, correspondence or any other written or oral communication, including notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority, including, without limitation, the United States Food and Drug Administration ("***FDA***"), the Federal Trade Commission, the Drug Enforcement Administration ("***DEA***"), the Centers for Medicare & Medicaid Services, and the U.S. Department of Health and Human Services Office of Inspector General, of potential or actual non-compliance by, or liability of, the Company under any Health Care Laws, except, with respect to any of the foregoing, such as would not, in the aggregate, reasonably be expected to have a Material Adverse Effect. To the Company' s knowledge, there are no facts or circumstances that would reasonably be expected to give rise to material liability of the Company under any Health Care Laws.

(y) The Company has been and is operating in compliance in all material respects with, such permits, licenses, franchises, registrations, exemptions, approvals, authorizations and clearances of the FDA and other governmental authorities required for the conduct of its business as currently conducted, except those the absence of which would not, in the aggregate, reasonably be expected to have a Material Adverse Effect (collectively, the "***Permits***"), and all such Permits are in full force and effect. The

Company has fulfilled and performed in all material respects all of its obligations with respect to the Permits, and, to the Company' s knowledge, no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of the holder of any Permit. All applications, notifications, submissions, information, claims, reports and statistics, and other data and conclusions derived therefrom, utilized as the basis for any and all requests for a Permit from the FDA or other governmental authority relating to the Company, its business and the products and services of the Company, when submitted to the FDA or other governmental authority, were true, complete and correct in all material respects as of the date of submission and any necessary or required updates, changes, corrections or modification to such applications, submissions, information and data have been submitted to the FDA or other governmental authority. The claims approved or allowed by the FDA and other governmental authorities for the products and services of the Company are valid and supported by adequate research, design, testing, analysis and disclosure.

(z) The manufacture of Company products by or on behalf of the Company is being conducted in compliance in all material respects with all applicable Health Care Laws, including, without limitation, the FDA' s current good manufacturing practice regulations at 21 C.F.R. Part 820 for products sold in the United States, and, to the extent applicable, the respective counterparts thereof promulgated by governmental authorities in countries outside the United States.

(aa) The Company has not had any product, clinical laboratory or manufacturing site (whether Company-owned or that of a third party manufacturer for Company products) subject to a governmental authority (including FDA) shutdown or import or export prohibition, nor received any FDA Form 483 or other governmental authority notice of inspectional observations, "warning letters," "untitled letters," requests to make changes to the Company products, processes or operations, or similar correspondence or notice from the FDA or other governmental authority alleging or asserting material noncompliance with any applicable Health Care Laws. To the Company' s knowledge, neither the FDA nor any other governmental authority is considering such action.

(bb) (i) There have been no recalls, field notifications, field corrections, market withdrawals or replacements, warnings, "dear doctor" letters, investigator notices, safety alerts or other notice of action relating to an alleged lack of safety, efficacy, or regulatory compliance of the Company products ("***Safety Notices***") and (ii) to the Company' s knowledge, there are no facts that would be reasonably likely to result in (x) a Safety Notice with respect to the Company products or services, (y) a change in labeling of any the Company products or services, or (z) a termination or suspension of marketing or testing of any the Company products or services.

(cc) Except as would not, in the aggregate, reasonably be expected to have a Material Adverse Effect, (i) the Company owns or possesses adequate rights with respect to all Intellectual Property used in or necessary for the conduct of its businesses, (ii) to the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property; (iii) there is no pending or, to the knowledge of the

Company, threatened, action, suit, proceeding or claim by others challenging the Company' s rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iv) the Intellectual Property owned by the Company, and to the knowledge of the Company, the Intellectual Property licensed to the Company, has not been adjudged invalid or unenforceable, in whole or in part, and there is no pending or, to the Company' s knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (v) there is no pending or, to the Company' s knowledge, threatened action, suit, proceeding or claim by others that the Company infringes, misappropriates or otherwise violates (or would, upon the commercialization of any product or service described in the Registration Statement and the Prospectus as under development, infringe or violate) any Intellectual Property or other proprietary rights of others, the Company has not received any written notice of such claim and the Company is unaware of any fact which would form a reasonable basis for any such claim; and (vi) to the Company' s knowledge, no employee of the Company is in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee' s employment with the Company or actions undertaken by the employee while employed with the Company. ***"Intellectual Property"*** shall mean all patents, patent applications, trademarks, service marks, trademark registrations, service mark registrations, trade dress and associated registrations, trade names, copyrights, licenses, inventions, trade secrets, domain names, systems, technology, know-how software and other intellectual property.

(dd) There are no legal or governmental proceedings pending to which the Company is a party or of which any property or assets of the Company is the subject that would, in the aggregate, reasonably be expected to have a Material Adverse Effect or would, in the aggregate, reasonably be expected to have a material adverse effect on the performance of this Agreement or the consummation of the transactions contemplated hereby; and to the Company' s knowledge, no such proceedings are threatened or contemplated by governmental authorities or others.

(ee) There are no contracts or other documents required to be described in the Registration Statement or the most recent Preliminary Prospectus or filed as exhibits to the Registration Statement that are not described and filed as required. The statements made in the most recent Preliminary Prospectus, insofar as they purport to constitute summaries of the terms of the contracts and other documents described and filed, constitute accurate summaries of the terms of such contracts and documents in all material respects. The Company has no knowledge that any other party to any such contract or other document has any intention not to render full performance in all material respects as contemplated by the terms thereof.

(ff) The statements made in the most recent Preliminary Prospectus, insofar as they purport to constitute summaries of the terms of statutes, rules or regulations, legal or governmental proceedings, constitute accurate summaries of the terms of such statutes, rules and regulations, legal and governmental proceedings in all material respects.

(gg) The Company carries, or is covered by, insurance from insurers of recognized financial responsibility in such amounts and covering such risks as is adequate for the conduct of its businesses and the value of its properties and as is customary for companies engaged in similar businesses in similar industries. All policies of insurance of the Company are in full force and effect; the Company is in compliance with the terms of such policies in all material respects; and the Company has not received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance; there are no claims by the Company under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have a Material Adverse Effect.

(hh) Except as described in the most recent Preliminary Prospectus, no relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, on the other hand, that is required to be described in the most recent Preliminary Prospectus which is not so described.

(ii) The Company is not engaged in any unfair labor practice; except for matters which would not, individually or in the aggregate, result in a Material Adverse Effect, (i) there is (A) no unfair labor practice complaint pending or, to the Company' s knowledge, threatened against the Company before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under collective bargaining agreements is pending or, to the Company' s knowledge, threatened, (B) no strike, labor dispute, slowdown, stoppage or other disturbance pending or, to the Company' s knowledge, threatened or imminent against the Company and (C) no union representation dispute currently existing concerning the employees of the Company, (ii) to the Company' s knowledge, no union organizing activities are currently taking place concerning the employees of the Company and (iii) there has been no violation of any federal, state, local or foreign law relating to discrimination in the hiring, promotion or pay of employees, any applicable wage or hour laws, any provision of the Worker Adjustment and Retraining Notification Act of 1988, as amended ("***WARN Act***") or the WARN Act' s state, foreign or local equivalent, or any provision of the Employee Retirement Income Security Act of 1974 or the rules and regulations promulgated thereunder concerning the employees of the Company.

(jj) The Company (i) is not in violation of its charter or by-laws (or similar organizational documents), (ii) is not in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant, condition or other obligation contained in any indenture, mortgage, deed of trust, loan agreement, license or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject, or (iii) is not in violation of any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over it or its property or

assets or has failed to obtain any license, permit, certificate, franchise or other governmental authorization or permit necessary to the ownership of its property or to the conduct of its business, except in the case of clauses (ii) and (iii), to the extent any such conflict, breach, violation or default would not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

(kk) Except as would not, in the aggregate, reasonably be expected to have a Material Adverse Effect, the Company (i) is, and at all times prior hereto was, in compliance with all laws, regulations, ordinances, rules, orders, judgments, decrees, permits or other legal requirements of any governmental authority, including without limitation any international, foreign, national, state, provincial, regional, or local authority, relating to pollution, the protection of human health or safety, the environment, or natural resources, or to use, handling, storage, manufacturing, transportation, treatment, discharge, disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants ("***Environmental Laws***") applicable to it, which compliance includes, without limitation, obtaining, maintaining and complying with all permits and authorizations and approvals required by Environmental Laws to conduct its businesses, and (ii) has not received notice or otherwise have knowledge of any actual or alleged violation of Environmental Laws, or of any actual or potential liability for or other obligation concerning the presence, disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants. Except as described in the most recent Preliminary Prospectus or as would not, in the aggregate, reasonably be expected to have a Material Adverse Effect, (x) there are no proceedings that are pending, or known to be contemplated, against the Company under Environmental Laws in which a governmental authority is also a party, (y) the Company is not aware of any issues regarding compliance with Environmental Laws, including any pending or proposed Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, and (z) the Company does not anticipate capital expenditures relating to Environmental Laws.

(ll) The Company has filed all material federal, state, local and foreign tax returns required to be filed through the date hereof, subject to permitted extensions, and has paid all material taxes due, and no tax deficiency has been determined adversely to the Company, nor does the Company have any knowledge of any tax deficiencies that have been, or could reasonably be expected to be asserted against the Company.

(mm) Except as would not, in the aggregate, reasonably be expected to have a Material Adverse Effect, (i) each "employee benefit plan" (within the meaning of Section 3(3) of the Employee Retirement Security Act of 1974, as amended ("***ERISA***")) for which the Company or any member of its "Controlled Group" (defined as any organization which is a member of a controlled group of corporations within the meaning of Section 414 of the Internal Revenue Code of 1986, as amended (the "***Code***")) would have any liability (each a "***Plan***") has been maintained in compliance in all respects with its terms and with the requirements of all applicable statutes, rules and regulations including ERISA and the Code; (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan excluding transactions effected pursuant to a statutory or administrative exemption; (iii)

with respect to each Plan subject to Title IV of ERISA (A) no "reportable event" (within the meaning of Section 4043(c) of ERISA) has occurred or is reasonably expected to occur, (B) no "accumulated funding deficiency" (within the meaning of Section 302 of ERISA or Section 412 of the Code), whether or not waived, has occurred or is reasonably expected to occur, (C) the fair market value of the assets under each Plan exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan), and (D) neither the Company or any member of its Controlled Group has incurred, or reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guaranty Corporation in the ordinary course and without default) in respect of a Plan (including a "multiemployer plan", within the meaning of Section 4001(c)(3) of ERISA); and (iv) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification.

(nn) The clinical, statistical and market-related data included in the most recent Preliminary Prospectus are based on or derived from sources that the Company believes to be reliable in all material respects.

(oo) The Company is not, and as of the applicable Delivery Date and, after giving effect to the offer and sale of the Stock and the application of the proceeds therefrom as described under "Use of Proceeds" in the most recent Preliminary Prospectus and the Prospectus, will not be, (i) an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended (the "***Investment Company Act***"), and the rules and regulations of the Commission thereunder, or (ii) a "business development company" (as defined in Section 2(a)(48) of the Investment Company Act).

(pp) Except as described in the most recent Preliminary Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company owned or to be owned by such person. Other than rights that have been waived in writing, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to include any securities of the Company in the securities registered pursuant to the Registration Statement or to otherwise register securities of such person under the Securities Act as a result of the filing of the Registration Statement.

(qq) The Company is not a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against any of them or the Underwriters for a brokerage commission, finder' s fee or like payment in connection with the offering and sale of the Stock.

(rr) The Company has not sold or issued any securities that would be integrated with the offering of the Stock contemplated by this Agreement pursuant to the Securities Act, the rules and regulations thereunder or the interpretations thereof by the Commission.

(ss) The Company and its affiliates have not taken, directly or indirectly, any action designed to or that has constituted or that could reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company in connection with the offering of the shares of the Stock.

(tt) The Stock has been approved for listing, subject to official notice of issuance and evidence of satisfactory distribution, on The NASDAQ Global Market.

(uu) The Company has not distributed and, prior to the later to occur of any Delivery Date and completion of the distribution of the Stock, will not distribute any offering material in connection with the offering and sale of the Stock other than any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus or Written Testing-the-Waters Communication to which the Representatives have consented in accordance with Section 1(h) or 5(a)(vi) and any Issuer Free Writing Prospectus set forth on Schedule V hereto or any Written Testing-the-Waters Communication set forth on Schedule VI hereto.

(vv) The Company is not in violation of or has received notice of any violation with respect to any federal or state law relating to discrimination in the hiring, promotion or pay of employees, nor any applicable federal or state wage and hour laws, nor any state law precluding the denial of credit due to the neighborhood in which a property is situated, the violation of any of which would reasonably be expected to have a Material Adverse Effect.

(ww) Neither the Company nor, to the knowledge of the Company, any director, officer, agent, employee or other person associated with or acting on behalf of the Company, has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977; or (iv) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment.

(xx) The operations of the Company are and have been conducted in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "***Money Laundering Laws***") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(yy) Neither the Company nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("***OFAC***"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(zz) From April 5, 2012 through the date hereof, the Company has been, and as of the date hereof is, an Emerging Growth Company.

(aaa) The Company has not authorized anyone other than the Underwriters to engage in communications with investors in reliance on Section 5(d) of the Securities Act. The Company confirms that the Underwriters have been authorized to act on its behalf in communicating with potential investors in reliance on Section 5(d) of the Securities Act.

Any certificate signed by any officer of the Company and delivered to the Representatives or counsel for the Underwriters in connection with the offering of the Stock shall be deemed a representation and warranty by the Company, as to matters covered thereby, to each Underwriter.

2. *Purchase of the Stock by the Underwriters.* On the basis of the representations, warranties and covenants contained in, and subject to the terms and conditions of, this Agreement, the Company agrees to sell 5,000,000 shares of the Firm Stock to the several Underwriters, and each of the Underwriters, severally and not jointly, agrees to purchase the number of shares of the Firm Stock set forth opposite that Underwriter' s name in Schedule I hereto. The respective purchase obligations of the Underwriters with respect to the Firm Stock shall be rounded among the Underwriters to avoid fractional shares, as the Representatives may determine.

In addition, the Company grants to the Underwriters an option to purchase up to 750,000 additional shares of Option Stock. Such option is exercisable in the event that the Underwriters sell more shares of Common Stock than the number of Firm Stock in the offering and as set forth in Section 4 hereof. Each Underwriter agrees, severally and not jointly, to purchase the number of shares of Option Stock (subject to such adjustments to eliminate fractional shares as the Representatives may determine) that bears the same proportion to the total number of shares of Option Stock to be sold on such Delivery Date as the number of shares of Firm Stock set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of shares of Firm Stock.

The purchase price payable by the Underwriters for both the Firm Stock and any Option Stock is $[ ] per share.

The Company is not obligated to deliver any of the Firm Stock or Option Stock to be delivered on the applicable Delivery Date, except upon payment for all such Stock to be purchased on such Delivery Date as provided herein.

3. *Offering of Stock by the Underwriters*. Upon authorization by the Representatives of the release of the Firm Stock, the several Underwriters propose to offer the Firm Stock for sale upon the terms and conditions to be set forth in the Prospectus.

4. *Delivery of and Payment for the Stock.* Delivery of and payment for the Firm Stock shall be made at 10:00 A.M., New York City time, on [−], 2013 at the offices of Gibson, Dunn & Crutcher LLP, 200 Park Avenue, New York, NY 10166 or at such other date or place as shall be determined by agreement between the Representatives and the Company. This date and time are sometimes referred to as the "***Initial Delivery Date***". Delivery of the Firm Stock shall be made to the Representatives for the account of each Underwriter against payment by the several Underwriters through the Representatives and of the respective aggregate purchase prices of the Firm Stock being sold by the Company to or upon the order of the Company of the purchase price by wire transfer in immediately available funds to the accounts specified by the Company. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligation of each Underwriter hereunder. The Company shall deliver the Firm Stock through the facilities of DTC unless the Representatives shall otherwise instruct.

The option granted in Section 2 will expire 30 days after the date of this Agreement and may be exercised in whole or from time to time in part by written notice being given to the Company by the Representatives; *provided* that if such date falls on a day that is not a business day, the option granted in Section 2 will expire on the next succeeding business day. Such notice shall set forth the aggregate number of shares of Option Stock as to which the option is being exercised, the names in which the shares of Option Stock are to be registered, the denominations in which the shares of Option Stock are to be issued and the date and time, as determined by the Representatives, when the shares of Option Stock are to be delivered; *provided, however*, that this date and time shall not be earlier than the Initial Delivery Date nor earlier than the second business day after the date on which the option shall have been exercised nor later than the fifth business day after the date on which the option shall have been exercised. Each date and time the shares of Option Stock are delivered is sometimes referred to as an "***Option Stock Delivery Date***", and the Initial Delivery Date and any Option Stock Delivery Date are sometimes each referred to as a "***Delivery Date***".

Delivery of the Option Stock by the Company and payment for the Option Stock by the several Underwriters through the Representatives shall be made at 10:00 A.M., New York City time, on the date specified in the corresponding notice described in the preceding paragraph or at such other date or place as shall be determined by agreement between the Representatives and the Company. On the Option Stock Delivery Date, the Company shall deliver or cause to be delivered the Option Stock to the Representatives for the account of each Underwriter against payment by the several Underwriters through the Representatives of the aggregate purchase price of the Option Stock being sold by the Company to or upon the order of the Company by wire transfer in immediately available funds to the accounts specified by the Company. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligation of each Underwriter hereunder. The Company shall deliver the Option Stock through the facilities of DTC unless the Representatives shall otherwise instruct.

5. *Further Agreements of the Company and the Underwriters*. (a) The Company agrees:

(i) To prepare the Prospectus in a form approved by the Representatives and to file such Prospectus pursuant to Rule 424(b) under the Securities Act not later than the Commission' s close of business on the second business day following the execution and delivery of this Agreement; to make no further amendment or any supplement to the Registration Statement or the Prospectus prior to the last Delivery Date except as provided herein; to advise the Representatives, promptly after it receives notice thereof, of the time when any amendment or supplement to the Registration Statement or the Prospectus has been filed and to furnish the Representatives with copies thereof; to advise the Representatives, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus, of the suspension of the qualification of the Stock for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding or examination for any such purpose or of any request by the Commission for the amending or supplementing of the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus or suspending any such qualification, to use promptly its best efforts to obtain its withdrawal.

(ii) To furnish promptly to each of the Representatives and to counsel for the Underwriters a signed copy of the Registration Statement as originally filed with the Commission, and each amendment thereto filed with the Commission, including all consents and exhibits filed therewith.

(iii) To deliver promptly to the Representatives such number of the following documents as the Representatives shall reasonably request: (A) conformed copies of the Registration Statement as originally filed with the Commission and each amendment thereto (in each case excluding exhibits other than this Agreement and the computation of per share earnings), (B) each Preliminary Prospectus, the Prospectus and any amended or supplemented Prospectus, (C) each Issuer Free Writing Prospectus and (D) each Written Testing-the-Waters Communication listed on Schedule VI hereto; and, if the delivery of a prospectus is required at any time after the date hereof in connection with the offering or sale of the Stock or any other securities relating thereto and if at such time any events shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus is delivered, not misleading, or, if for any other reason it shall be necessary to amend or supplement the Prospectus in order to comply with the Securities Act, to notify the Representatives and, upon their request, to file such document and to prepare and furnish without charge to each Underwriter and to any dealer in securities as many copies as the Representatives may from time to time reasonably request of an amended or supplemented Prospectus that will correct such statement or omission or effect such compliance.

(iv) To file promptly with the Commission any amendment or supplement to the Registration Statement or the Prospectus that may, in the judgment of the Company or the Representatives, be required by the Securities Act or requested by the Commission.

(v) Prior to filing with the Commission any amendment or supplement to the Registration Statement or the Prospectus to furnish a copy thereof to the Representatives and counsel for the Underwriters and obtain the consent of the Representatives to the filing.

(vi) Not to make any offer relating to the Stock that would constitute an Issuer Free Writing Prospectus or make any communication that would constitute a Testing-the-Waters Communication, or otherwise engage in any Testing-the-Waters Communication, without the prior written consent of the Representatives, which shall be deemed to have been given for any Issuer Free Writing Prospectus listed on Schedule IV or Schedule V hereto and any Written Testing-the-Waters Communication listed on Schedule VI hereto.

(vii) To comply with all applicable requirements of Rule 433 under the Securities Act with respect to any Issuer Free Writing Prospectus. If at any time after the date hereof any events shall have occurred as a result of which any Issuer Free Writing Prospectus, as then amended or supplemented, would conflict with the information in the Registration Statement, the most recent Preliminary Prospectus or the Prospectus or would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, or, if for any other reason it shall be necessary to amend or supplement any Issuer Free Writing Prospectus, to notify the Representatives and, upon their request, to file such document and to prepare and furnish without charge to each Underwriter as many copies as the Representatives may from time to time reasonably request of an amended or supplemented Issuer Free Writing Prospectus that will correct such conflict, statement or omission or effect such compliance.

(viii) As soon as practicable after the Effective Date (it being understood that the Company shall have until at least 410 days or, if the fourth quarter following the fiscal quarter that includes the Effective Date is the last fiscal quarter of the Company' s fiscal year, 455 days after the end of the Company' s current fiscal quarter), to make generally available to the Company' s security holders and to deliver to the Representatives an earnings statement of the Company (which need not be audited) complying with Section 11(a) of the Securities Act and the rules and regulations thereunder (including, at the option of the Company, Rule 158).

(ix) Promptly from time to time to take such action as the Representatives may reasonably request to qualify the Stock for offering and sale under the securities or Blue Sky laws of Canada and such other jurisdictions as the Representatives may reasonably request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Stock; *provided* that in connection therewith the Company shall not be required to (i) qualify as a foreign corporation in any jurisdiction in which it would not otherwise be required to so qualify, (ii) file a general consent to service of process in any such jurisdiction, or (iii) subject itself to taxation in any jurisdiction in which it would not otherwise be subject.

(x) For a period commencing on the date hereof and ending on the 180th day after the date of the Prospectus (the "***Lock-Up Period***"), not to, directly or indirectly, (A) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock (other than the Stock and shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans existing on the date hereof or pursuant to currently outstanding options, warrants or rights not issued under one of those plans), or sell or grant options, rights or warrants with respect to any shares of Common Stock or securities convertible into or exchangeable for Common Stock (other than the grant of options pursuant to option plans existing on the date hereof), (B) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of such shares of Common Stock, whether any such transaction described in clause (A) or (B) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise, (C) file or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of Common Stock or securities convertible, exercisable or exchangeable into Common Stock or any other securities of the Company (other than any registration statement on Form S-8), or (D) publicly disclose the intention to do any of the foregoing, in each case without the prior written consent of the Representatives, on behalf of the Underwriters, and to cause each officer, director and stockholder of the Company set forth on Schedule II hereto to furnish to the Representatives, prior to the Initial Delivery Date, a letter or letters, substantially in the form of Exhibit A hereto (the "***Lock-Up Agreements***"). Notwithstanding the foregoing, if the Company ceases to be an Emerging Growth Company at any time prior to the expiration of the Lock-Up Period, and if (x) during the last 17 days of the Lock-Up Period, the Company issues an earnings release or material news or a material event relating to the Company occurs, or (y) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the Lock-Up Period, then the restrictions imposed in this paragraph shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or the occurrence of the material event, unless the Representatives on behalf of the Underwriters, agree not to require such extension in writing.

(xi) If the Representatives, in their sole discretion, agree to release or waive the restrictions set forth in a Lock-Up Agreement for an officer or director of the Company and provide the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by issuing a press release substantially in the form of Exhibit B hereto, and containing such other information as the Representatives may require with respect to the circumstances of the release or waiver and/or the identity of the officer(s) and/or director(s) with respect to which the release or waiver applies, through a major news service at least two business days before the effective date of the release or waiver.

(xii) To apply the net proceeds from the sale of the Stock being sold by the Company substantially in accordance with the description as set forth in the Prospectus under the caption "Use of Proceeds."

(xiii) To file with the Commission such information on Form 10-Q or Form 10-K as may be required by Rule 463 under the Securities Act.

(xiv) If the Company elects to rely upon Rule 462(b) under the Securities Act, the Company shall file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b) under the Securities Act by 10:00 P.M., Washington, D.C. time, on the date of this Agreement, and the Company shall at the time of filing pay the Commission the filing fee for the Rule 462(b) Registration Statement.

(xv) The Company and its affiliates will not take, directly or indirectly, any action designed to or that has constituted or that reasonably would be expected to cause or result in the stabilization or manipulation of the price of any security of the Company in connection with the offering of the Stock.

(xvi) The Company will do and perform all things required or necessary to be done and performed under this Agreement by it prior to each Delivery Date, and to satisfy all conditions precedent to the Underwriters' obligations hereunder to purchase the Stock.

(xvii) The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (A) completion of the distribution of the Stock within the meaning of the Securities Act and (B) completion of the Lock-Up Period.

(xviii) If at any time following the distribution of any Written Testing-the-Waters Communication listed on Schedule VI hereto there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(b) Each Underwriter severally agrees that such Underwriter shall not:

(i) include any "issuer information" (as defined in Rule 433 under the Securities Act) in any "free writing prospectus" (as defined in Rule 405 under the Securities Act) used or referred to by such Underwriter without the prior consent of the Company if the inclusion of such issuer information by such Underwriter in such free writing prospectus would require the Company to file such free writing prospectus with the

Commission pursuant to Rule 433 under the Securities Act and such free writing prospectus would not otherwise be required to be filed by the Company with the Commission thereunder but for the inclusion of such issuer information in such free writing prospectus by such underwriter. The foregoing notwithstanding, no such consent shall be required with respect to any such issuer information contained in the then most recent Preliminary Prospectus filed by the Company with the Commission prior to the use of such free writing prospectus or any issuer free writing prospectus listed in Schedule IV hereto. Any issuer information included by an Underwriter in a free writing prospectus with the consent of the Company is referred to herein as "***Permitted Issuer Information***"; or

(ii) unless the Company ceases to be an Emerging Growth Company at any time prior to the expiration of the Lock-Up Period, enforce the lock-up extension provisions contained in the fourth paragraph of the form of Lock-Up Agreement attached as Exhibit A hereto against any signatory to any Lock-Up Agreement.

6. *Expenses.* The Company agrees, whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, to pay all expenses, costs, fees and taxes incident to and in connection with (a) the authorization, issuance, sale and delivery of the Stock and any stamp duties or other taxes payable in that connection, and the preparation and printing of certificates for the Stock; (b) the preparation, printing and filing under the Securities Act of the Registration Statement (including any exhibits thereto), any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication listed on Schedule VI hereto and any amendment or supplement thereto; (c) the distribution of the Registration Statement (including any exhibits thereto), any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication listed on Schedule VI hereto and any amendment or supplement thereto, all as provided in this Agreement; (d) the distribution of this Agreement, any supplemental agreement among Underwriters, and any other related documents in connection with the offering, purchase, sale and delivery of the Stock; (e) any required review by the Financial Industry Regulatory Authority, Inc. (the "***FINRA***") of the terms of sale of the Stock (including related reasonable fees and expenses of counsel to the Underwriters); (f) the listing of the Stock on The NASDAQ Global Market and/or any other exchange; (g) the qualification of the Stock under the securities laws of the several jurisdictions as provided in Section 5(a)(ix) and the preparation, printing and distribution of a Blue Sky Memorandum (including related reasonable fees and expenses of counsel to the Underwriters); (h) the preparation, printing and distribution of one or more versions of the Preliminary Prospectus and the Prospectus for distribution in Canada, often in the form of a Canadian "wrapper" (including related reasonable fees and expenses of Canadian counsel to the Underwriters); (i) the investor presentations on any "road show" undertaken in connection with the marketing of the Stock, including, without limitation, expenses associated with any electronic road show, travel and lodging expenses of the representatives and officers of the Company and one-half of the cost of any aircraft chartered in connection with the road show; and (j) all other costs and expenses incident to the performance of the obligations of the Company under this Agreement; *provided* that, except as provided in this Section 6 and in Section 11, the Underwriters shall pay their own costs and expenses,

including the costs and expenses of their counsel, any transfer taxes on the Stock which they may sell and the expenses of advertising any offering of the Stock made by the Underwriters, the travel and lodging expenses of their representatives and one-half of the cost of any aircraft chartered in connection with the road show.

7. *Conditions of Underwriters' Obligations*. The respective obligations of the Underwriters hereunder are subject to the accuracy, when made and, on each Delivery Date, of the representations and warranties of the Company contained herein, to the performance by the Company of its obligations hereunder, and to each of the following additional terms and conditions:

(a) The Prospectus shall have been timely filed with the Commission in accordance with Section 5(a)(i). The Company shall have complied with all filing requirements applicable to any Issuer Free Writing Prospectus used or referred to after the date hereof; no stop order suspending the effectiveness of the Registration Statement or preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus shall have been issued and no proceeding or examination for such purpose shall have been initiated or threatened by the Commission; and any request of the Commission for inclusion of additional information in the Registration Statement or the Prospectus or otherwise shall have been complied with. If the Company has elected to rely upon Rule 462(b) under the Securities Act, the Rule 462(b) Registration Statement shall have become effective by 10:00 P.M., Washington, D.C. time, on the date of this Agreement.

(b) No Underwriter shall have discovered and disclosed to the Company on or prior to such Delivery Date that the Registration Statement, the Prospectus or the Pricing Disclosure Package, or any amendment or supplement thereto, contains an untrue statement of a fact which, in the opinion of Gibson, Dunn & Crutcher LLP, counsel for the Underwriters, is material or omits to state a fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(c) All corporate proceedings and other legal matters incident to the authorization, form and validity of this Agreement, the Stock, the Registration Statement, the Prospectus and any Issuer Free Writing Prospectus, and all other legal matters relating to this Agreement and the transactions contemplated hereby shall be reasonably satisfactory in all material respects to counsel for the Underwriters, and the Company shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.

(d) Cooley LLP shall have furnished to the Representatives its written opinion, as counsel to the Company, addressed to the Underwriters and dated such Delivery Date, in substantially the form attached hereto as Exhibit C-1.

(e) Cooley LLP shall have furnished to the Representatives its written opinion, as special FDA counsel to the Company, addressed to the Underwriters and dated such Delivery Date, in substantially the form attached hereto as Exhibit C-2.

(f) Myers Bigel Sibley & Saiovec, P.A., shall have furnished to the Representatives its written opinion, as counsel to the Company, addressed to the Underwriters and dated such Delivery Date, in substantially the form attached hereto as Exhibit C-3.

(g) The Representatives shall have received from Gibson, Dunn & Crutcher LLP, counsel for the Underwriters, such opinion or opinions, dated such Delivery Date, with respect to the issuance and sale of the Stock, the Registration Statement, the Prospectus and the Pricing Disclosure Package and other related matters as the Representatives may reasonably require, and the Company shall have furnished to such counsel such documents as they reasonably request for the purpose of enabling them to pass upon such matters.

(h) At the time of execution of this Agreement, the Representatives shall have received from Ernst & Young LLP a letter, in form and substance satisfactory to the Representatives, addressed to the Underwriters and dated the date hereof (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, and (ii) stating, as of the date hereof (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the most recent Preliminary Prospectus, as of a date not more than three days prior to the date hereof), the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants' "comfort letters" to underwriters in connection with registered public offerings.

(i) With respect to the letter of Ernst & Young LLP referred to in the preceding paragraph and delivered to the Representatives concurrently with the execution of this Agreement (the "***initial letter***"), the Company shall have furnished to the Representatives a letter (the "***bring-down letter***") of such accountants, addressed to the Underwriters and dated such Delivery Date (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, (ii) stating, as of the date of the bring-down letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Prospectus, as of a date not more than three days prior to the date of the bring-down letter), the conclusions and findings of such firm with respect to the financial information and other matters covered by the initial letter, and (iii) confirming in all material respects the conclusions and findings set forth in the initial letter.

(j) The Company shall have furnished to the Representatives a certificate, dated such Delivery Date, of its Chief Executive Officer and its Chief Financial Officer as to such matters as the Representatives may reasonably request, including, without limitation, a statement that:

(i) The representations, warranties and agreements of the Company in Section 1 are true and correct on and as of such Delivery Date, and the Company has complied with all its agreements contained herein and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such Delivery Date;

(ii) No stop order suspending the effectiveness of the Registration Statement has been issued; and no proceedings or examination for that purpose have been instituted or, to the knowledge of such officers, threatened; and

(iii) They have examined the Registration Statement, the Prospectus and the Pricing Disclosure Package, and, in their opinion, (A) (1) the Registration Statement, as of the Effective Date, (2) the Prospectus, as of its date and on the applicable Delivery Date, and (3) the Pricing Disclosure Package, as of the Applicable Time, did not and do not contain any untrue statement of a material fact and did not and do not omit to state a material fact required to be stated therein or necessary to make the statements therein (except in the case of the Registration Statement, in the light of the circumstances under which they were made) not misleading, and (B) since the Effective Date, no event has occurred that should have been set forth in a supplement or amendment to the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus that has not been so set forth.

(k) Except as described in the most recent Preliminary Prospectus, (i) the Company has not sustained, since the date of the latest audited financial statements included in the most recent Preliminary Prospectus, any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, or (ii) since such date there shall not have been any change in the capital stock or short or long-term debt of the Company or any change, or any development involving a prospective change, in or affecting the condition (financial or otherwise), results of operations, stockholders' equity, properties, management, business or prospects of the Company, the effect of which, in any such case described in clause (i) or (ii), is, individually or in the aggregate, in the judgment of the Representatives, so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Stock being delivered on such Delivery Date on the terms and in the manner contemplated in the Prospectus.

(l) The Company has no debt securities or preferred stock that is rated by any "nationally recognized statistical rating organization" (as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Securities Act).

(m) Subsequent to the execution and delivery of this Agreement there shall not have occurred any of the following: (i) trading in securities generally on The New York Stock Exchange, The NASDAQ Global Select Market, The NASDAQ Global Market, The NASDAQ Capital Market or trading in any securities of the Company on any exchange or in the over-the-counter market, shall have been suspended or materially limited or the settlement of such trading generally shall have been materially disrupted or minimum prices shall have been established on any such exchange or such market by the

Commission, by such exchange or by any other regulatory body or governmental authority having jurisdiction, (ii) a general moratorium on commercial banking activities shall have been declared by federal or state authorities, (iii) the United States shall have become engaged in hostilities, there shall have been an escalation in hostilities involving the United States or there shall have been a declaration of a national emergency or war by the United States, or (iv) there shall have occurred such a material adverse change in general economic, political or financial conditions, including, without limitation, as a result of terrorist activities after the date hereof (or the effect of international conditions on the financial markets in the United States shall be such), as to make it, in the case of any of the events described in clauses (i), (ii), (iii) or (iv), in the judgment of the Representatives, impracticable or inadvisable to proceed with the public offering or delivery of the Stock being delivered on such Delivery Date on the terms and in the manner contemplated in the Prospectus.

(n) The NASDAQ Global Market shall have approved the Stock for listing, subject only to official notice of issuance and evidence of satisfactory distribution.

(o) The Lock-Up Agreements between the Representatives and the officers, directors and stockholders of the Company set forth on Schedule II, delivered to the Representatives on or before the date of this Agreement, shall be in full force and effect on such Delivery Date.

(p) On or prior to each Delivery Date, the Company shall have furnished to the Underwriters such further certificates and documents as the Representatives may reasonably request.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Underwriters.

8. *Indemnification and Contribution.*

(a) The Company hereby agrees to indemnify and hold harmless each Underwriter, its affiliates, directors, officers and employees and each person, if any, who controls any Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof (including, but not limited to, any loss, claim, damage, liability or action relating to purchases and sales of Stock), to which that Underwriter, affiliate, director, officer, employee or controlling person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in (A) any Preliminary Prospectus, the Registration Statement, the Prospectus or in any amendment or supplement thereto, (B) any Issuer Free Writing Prospectus or in any amendment or supplement thereto, (C) any Permitted Issuer Information used or referred to in any "free writing prospectus" (as defined in Rule 405 under the Securities Act) used or referred to by any Underwriter, (D) any materials or information provided to investors by, or with the approval of, the

Company in connection with the marketing of the offering of the Stock, including (x) any "road show" (as defined in Rule 433 under the Securities Act) not constituting an Issuer Free Writing Prospectus and (y) any Testing-the-Waters Communication (any materials, information or other communication pursuant to this clause (D), the "***Marketing Materials***"), or (E) any Blue Sky application or other document prepared or executed by the Company (or based upon any written information furnished by the Company for use therein) specifically for the purpose of qualifying any or all of the Stock under the securities laws of any state or other foreign jurisdiction (any such application, document or information being hereinafter called a "***Blue Sky Application***"), or (ii) the omission or alleged omission to state in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Permitted Issuer Information, any Marketing Materials or any Blue Sky Application any material fact required to be stated therein or necessary to make the statements therein (except in the case of the Registration Statement, in light of the circumstances under which they were made) not misleading, and shall reimburse each Underwriter and each such affiliate, director, officer, employee or controlling person promptly upon demand for any legal or other expenses reasonably incurred by that Underwriter, affiliate, director, officer, employee or controlling person in connection with investigating or defending or preparing to defend against any such loss, claim, damage, liability or action as such expenses are incurred; *provided*, *however*, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of, or is based upon, any untrue statement or alleged untrue statement or omission or alleged omission made in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any such amendment or supplement thereto or in any Permitted Issuer Information, any Marketing Materials or any Blue Sky Application, in reliance upon and in conformity with written information concerning such Underwriter furnished to the Company through the Representatives by or on behalf of any Underwriter specifically for inclusion therein, which information consists solely of the information specified in Section 8(e). The foregoing indemnity agreement is in addition to any liability which the Company may otherwise have to any Underwriter or to any affiliate, director, officer, employee or controlling person of that Underwriter.

(b) Each Underwriter, severally and not jointly, shall indemnify and hold harmless the Company, its directors (including any person who, with his or her consent, is named in the Registration Statement as about to become a director of the Company), officers and employees, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof, to which the Company or any such director, officer, employee or controlling person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Marketing Materials or Blue Sky Application, or (ii) the omission or alleged omission to state in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing

Prospectus or in any amendment or supplement thereto or in any Marketing Materials or any Blue Sky Application, any material fact required to be stated therein or necessary to make the statements therein not misleading, but in each case only to the extent that the untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information concerning such Underwriter furnished to the Company through the Representatives by or on behalf of that Underwriter specifically for inclusion therein, which information is limited to the information set forth in Section 8(e). The foregoing indemnity agreement is in addition to any liability that any Underwriter may otherwise have to the Company or any such director, officer, employee or controlling person.

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of any claim or the commencement of any action, the indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the claim or the commencement of that action; *provided*, *however*, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have under this Section 8 except to the extent it has been materially prejudiced (through the forfeiture of substantive rights and defenses) by such failure and, *provided*, *further*, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have to an indemnified party otherwise than under this Section 8. If any such claim or action shall be brought against an indemnified party, and it shall notify the indemnifying party thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it wishes, jointly with any other similarly notified indemnifying party, to assume the defense thereof with counsel reasonably satisfactory to the indemnified party. After notice from the indemnifying party to the indemnified party of its election to assume the defense of such claim or action, the indemnifying party shall not be liable to the indemnified party under this Section 8 for any legal or other expenses subsequently incurred by the indemnified party in connection with the defense thereof other than reasonable costs of investigation; *provided, however*, that the indemnified party shall have the right to employ counsel to represent jointly the indemnified party and those other indemnified parties and their respective directors, officers, employees and controlling persons who may be subject to liability arising out of any claim in respect of which indemnity may be sought under this Section 8 if (i) the indemnified party and the indemnifying party shall have so mutually agreed; (ii) the indemnifying party has failed within a reasonable time to retain counsel reasonably satisfactory to the indemnified party; (iii) the indemnified party and its directors, officers, employees and controlling persons shall have reasonably concluded that there may be legal defenses available to them that are different from or in addition to those available to the indemnifying party; or (iv) the named parties in any such proceeding (including any impleaded parties) include both the indemnified parties or their respective directors, officers, employees or controlling persons, on the one hand, and the indemnifying party, on the other hand, and representation of both sets of parties by the same counsel would be inappropriate due to actual or potential differing interests between them, and in any such event the fees and expenses of such separate counsel shall be paid by the indemnifying party. No indemnifying party shall (x) without the prior written consent of the indemnified parties (which consent shall not be unreasonably withheld), settle or compromise or consent to the entry of any judgment with respect to

any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding and does not include a statement as to, or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party, or (y) be liable for any settlement of any such action effected without its written consent (which consent shall not be unreasonably withheld), but if settled with the consent of the indemnifying party or if there be a final judgment for the plaintiff in any such action, the indemnifying party agrees to indemnify and hold harmless any indemnified party from and against any loss or liability by reason of such settlement or judgment.

(d) If the indemnification provided for in this Section 8 shall for any reason be unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or 8(b) in respect of any loss, claim, damage or liability, or any action in respect thereof, referred to therein, then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability, or action in respect thereof, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other, from the offering of the Stock, or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other, with respect to the statements or omissions that resulted in such loss, claim, damage or liability, or action in respect thereof, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters, on the other, with respect to such offering shall be deemed to be in the same proportion as the total net proceeds from the offering of the Stock purchased under this Agreement (before deducting expenses) received by the Company, as set forth in the table on the cover page of the Prospectus, on the one hand, and the total underwriting discounts and commissions received by the Underwriters with respect to the shares of the Stock purchased under this Agreement, as set forth in the table on the cover page of the Prospectus, on the other hand. The relative fault shall be determined by reference to whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were to be determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, damage or liability, or action in respect thereof, referred to above in this Section 8(d) shall be deemed to include, for purposes of this Section 8(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions

of this Section 8(d), in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the offering of the Stock exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute as provided in this Section 8(d) are several in proportion to their respective underwriting obligations and not joint.

(e) The Underwriters severally confirm and the Company acknowledges and agrees that the statements regarding delivery of shares by the Underwriters set forth on the cover page of the most recent Preliminary Prospectus and the Prospectus and the following statements appearing under the caption "Underwriting" in the most recent Preliminary Prospectus and the Prospectus:

(i) the first sentence of the second paragraph under the heading "Commissions and Expenses";

(ii) the statements regarding the factors the Representatives will consider in connection with lock-up releases and determining the initial public offering price;

(iii) the statements under the heading "Stabilization, Short Positions and Penalty Bids"; and

(iv) the statements regarding allocation by the Representatives of online distributions and discretionary sales;

constitute the only information concerning such Underwriters furnished in writing to the Company by or on behalf of the Underwriters specifically for inclusion in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Marketing Materials.

9. *Defaulting Underwriters*.

(a) If, on any Delivery Date, any Underwriter defaults in its obligations to purchase the Stock that it has agreed to purchase under this Agreement, the remaining non-defaulting Underwriters may in their discretion arrange for the purchase of such Stock by the non-defaulting Underwriters or other persons satisfactory to the Company on the terms contained in this Agreement. If, within 36 hours after any such default by any Underwriter, the non-defaulting Underwriters do not arrange for the purchase of such Stock, then the Company shall be entitled to a further period of 36 hours within which to procure other persons satisfactory to the non-defaulting Underwriters to purchase such Stock on such terms. In the event that within the respective prescribed

periods, the non-defaulting Underwriters notify the Company that they have so arranged for the purchase of such Stock, or the Company notifies the non-defaulting Underwriters that it has so arranged for the purchase of such Stock, either the non-defaulting Underwriters or the Company may postpone such Delivery Date for up to seven full business days in order to effect any changes that in the opinion of counsel for the Company or counsel for the Underwriters may be necessary in the Registration Statement, the Prospectus or in any other document or arrangement, and the Company agrees to promptly prepare any amendment or supplement to the Registration Statement, the Prospectus or in any such other document or arrangement that effects any such changes. As used in this Agreement, the term "Underwriter" includes, for all purposes of this Agreement unless the context requires otherwise, any party not listed in Schedule I hereto that, pursuant to this Section 9, purchases Stock that a defaulting Underwriter agreed but failed to purchase.

(b) If, after giving effect to any arrangements for the purchase of the Stock of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the total number of shares of the Stock that remains unpurchased does not exceed one-eleventh of the total number of shares of all the Stock, then the Company shall have the right to require each non-defaulting Underwriter to purchase the total number of shares of Stock that such Underwriter agreed to purchase hereunder plus such Underwriter' s pro rata share (based on the total number of shares of Stock that such Underwriter agreed to purchase hereunder) of the Stock of such defaulting Underwriter or Underwriters for which such arrangements have not been made; *provided* that the non-defaulting Underwriters shall not be obligated to purchase more than 110% of the total number of shares of Stock that it agreed to purchase on such Delivery Date pursuant to the terms of Section 2.

(c) If, after giving effect to any arrangements for the purchase of the Stock of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the total number of shares of Stock that remains unpurchased exceeds one-eleventh of the total number of shares of all the Stock, or if the Company shall not exercise the right described in paragraph (b) above, then this Agreement shall terminate without liability on the part of the non-defaulting Underwriters. Any termination of this Agreement pursuant to this Section 9 shall be without liability on the part of the Company, except that the Company will continue to be liable for the payment of expenses as set forth in Sections 6 and 11 and except that the provisions of Section 8 shall not terminate and shall remain in effect.

(d) Nothing contained herein shall relieve a defaulting Underwriter of any liability it may have to the Company or any non-defaulting Underwriter for damages caused by its default.

10. *Termination.* The obligations of the Underwriters hereunder may be terminated by the Representatives by notice given to and received by the Company prior to delivery of and payment for the Firm Stock if, prior to that time, any of the events described in Sections 7(k) and 7(m) shall have occurred or if the Underwriters shall decline to purchase the Firm Stock for any reason permitted under this Agreement.

11. *Reimbursement of Underwriters' Expenses.* If (a) the Company shall fail to tender the Stock for delivery to the Underwriters for any reason, or (b) the Underwriters shall decline to purchase the Stock for any reason permitted under this Agreement, the Company will reimburse the Underwriters for all reasonable out-of-pocket expenses (including reasonable fees and disbursements of counsel for the Underwriters) incurred by the Underwriters in connection with this Agreement and the proposed purchase of the Stock, and upon demand the Company shall pay the full amount thereof to the Representatives. If this Agreement is terminated pursuant to Section 9 by reason of the default of one or more Underwriters, the Company shall not be obligated to reimburse any defaulting Underwriter on account of those expenses.

12. *Research Analyst Independence.* The Company acknowledges that the Underwriters' research analysts and research departments are required to be independent from their respective investment banking divisions and are subject to certain regulations and internal policies, and that such Underwriters' research analysts may hold views and make statements or investment recommendations and/or publish research reports with respect to the Company and/or the offering that differ from the views of their respective investment banking divisions. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriters with respect to any conflict of interest that may arise from the fact that the views expressed by their independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Company by such Underwriters' investment banking divisions. The Company acknowledges that each of the Underwriters is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short positions in debt or equity securities of the companies that may be the subject of the transactions contemplated by this Agreement.

13. *No Fiduciary Duty*. The Company acknowledges and agrees that in connection with this offering, sale of the Stock or any other services the Underwriters may be deemed to be providing hereunder, notwithstanding any preexisting relationship, advisory or otherwise, between the parties or any oral representations or assurances previously or subsequently made by the Underwriters: (a) no fiduciary or agency relationship between the Company and any other person, on the one hand, and the Underwriters, on the other, exists; (b) the Underwriters are not acting as advisors, expert or otherwise, to the Company, including, without limitation, with respect to the determination of the public offering price of the Stock, and such relationship between the Company, on the one hand, and the Underwriters, on the other, is entirely and solely commercial, based on arms-length negotiations; (c) any duties and obligations that the Underwriters may have to the Company shall be limited to those duties and obligations specifically stated herein; and (d) the Underwriters and their respective affiliates may have interests that differ from those of the Company. The Company hereby waives any claims that the Company may have against the Underwriters with respect to any breach of fiduciary duty in connection with this offering.

14. *Notices, etc.* All statements, requests, notices and agreements hereunder shall be in writing, and:

(a) if to the Underwriters, shall be delivered or sent by mail to:

Barclays Capital Inc.
745 Seventh Avenue
New York, New York 10019
Attention: Syndicate Registration

with a copy, in the case of any notice pursuant to Section 8(c), to:

Director of Litigation
Office of the General Counsel
Barclays Capital Inc.
745 Seventh Avenue
New York, New York 10019

and

UBS Securities LLC
1285 Avenue of the Americas
New York, New York 10019
Attention: Syndicate/Michael Ryan
Facsimile: (212) 713-3371

and

Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, Minnesota 55402
Attention: Equity Capital Markets
Facsimile: (612) 303-1070

with a copy to:

Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, Minnesota 55402
Attention: General Counsel
Facsimile: (612) 303-1068

(b) if to the Company, shall be delivered or sent by mail or facsimile transmission to the address of the Company set forth in the Registration Statement, Attention: Chief Financial Officer (Facsimile: (919) 872-5927).

Any such statements, requests, notices or agreements shall take effect at the time of receipt thereof. The Company shall be entitled to act and rely upon any request, consent, notice or agreement given or made on behalf of the Underwriters by the Representatives.

15. *Persons Entitled to Benefit of Agreement*. This Agreement shall inure to the benefit of and be binding upon the Underwriters, the Company, and their respective successors. This Agreement and the terms and provisions hereof are for the sole benefit of only those persons, except that (a) the representations, warranties, indemnities and agreements of the Company contained in this Agreement shall also be deemed to be for the benefit of the directors, officers and employees of the Underwriters and each person or persons, if any, who control any Underwriter within the meaning of Section 15 of the Securities Act, and (b) the indemnity agreement of the Underwriters contained in Section 8(b) of this Agreement shall be deemed to be

for the benefit of the directors of the Company, the officers of the Company who have signed the Registration Statement and any person controlling the Company within the meaning of Section 15 of the Securities Act. Nothing in this Agreement is intended or shall be construed to give any person, other than the persons referred to in this Section 15, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein.

16. *Survival.* The respective indemnities, representations, warranties and agreements of the Company and the Underwriters contained in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall survive the delivery of and payment for the Stock and shall remain in full force and effect, regardless of any investigation made by or on behalf of any of them or any person controlling any of them.

17. *Definition of the Terms "Business Day" and "Affiliate".* For purposes of this Agreement, (a) "***business day***" means each Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in New York are generally authorized or obligated by law or executive order to close, and (b) "***affiliate***" has the meaning set forth in Rule 405 under the Securities Act.

18. *Governing Law*. **This Agreement shall be governed by and construed in accordance with the laws of the State of New York.**

19. *Waiver of Jury Trial*. The Company and the Underwriters hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

20. *Counterparts.* This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original but all such counterparts shall together constitute one and the same instrument.

21. *Headings.* The headings herein are inserted for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement.

If the foregoing correctly sets forth the agreement between the Company and the Underwriters, please indicate your acceptance in the space provided for that purpose below.

Very truly yours,

LIPOSCIENCE, INC.

By: _____

Name:

Title:

Accepted:

BARCLAYS CAPITAL INC.
UBS SECURITIES LLC
PIPER JAFFRAY & CO.

For themselves and as Representatives
of the several Underwriters named
in Schedule I hereto

BY BARCLAYS CAPITAL INC.

By: _____
Authorized Representative

By UBS SECURITIES LLC

By: _____
Authorized Representative

By: _____
Authorized Representative

By PIPER JAFFRAY & CO.

By: _____
Authorized Representative

SCHEDULE I

Underwriters	Number of Shares of Firm Stock
Barclays Capital Inc.	
UBS Securities LLC	
Piper Jaffray & Co.	
Total	5,000,000

SCHEDULE II

PERSONS DELIVERING LOCK-UP AGREEMENTS

Directors

Officers

Stockholders

SCHEDULE III

ORALLY CONVEYED PRICING INFORMATION

1. *Public offering price*

2. *Number of shares offered*

SCHEDULE IV

ISSUER FREE WRITING PROSPECTUSES - ROAD SHOW MATERIALS

SCHEDULE V

ISSUER FREE WRITING PROSPECTUSES

SCHEDULE VI

WRITTEN TESTING-THE-WATERS COMMUNICATIONS

EXHIBIT A

LOCK-UP LETTER AGREEMENT

BARCLAYS CAPITAL INC.
UBS SECURITIES LLC
PIPER JAFFRAY & CO.

As Representatives of the several
Underwriters named in Schedule I,
c/o Barclays Capital Inc.
745 Seventh Avenue
New York, New York 10019

Ladies and Gentlemen:

The undersigned understands that you and certain other firms (the "***Underwriters***") propose to enter into an Underwriting Agreement (the "***Underwriting Agreement***") providing for the purchase by the Underwriters of shares (the "***Stock***") of Common Stock, par value $0.001 per share (the "***Common Stock***"), of LipoScience, Inc., a Delaware corporation (the "***Company***"), and that the Underwriters propose to reoffer the Stock to the public (the "***Offering***").

In consideration of the execution of the Underwriting Agreement by the Underwriters, and for other good and valuable consideration, the undersigned hereby irrevocably agrees that, without the prior written consent of the Representatives, on behalf of the Underwriters, the undersigned will not, directly or indirectly, (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of Common Stock (including, without limitation, shares of Common Stock that may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission (the "***SEC***") and shares of Common Stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for Common Stock, (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise, (3) make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock or any other securities of the Company, or (4) publicly disclose the intention to do any of the foregoing for a period commencing on the date hereof and ending on the 180th day after the date of the final prospectus relating to the Offering (such 180-day period, the "***Lock-Up Period***").

If the undersigned is an officer or director of the Company, (i) each of the Representatives agrees that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of Common Stock, the Representatives will notify the Company of the impending release or waiver, and (ii) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by issuing a press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if both (a) the release or waiver is effected solely to permit a transfer not for consideration, and (b) the transferee has agreed in writing to be bound by the same terms described in this letter that are applicable to the transferor, to the extent and for the duration that such terms remain in effect at the time of the transfer.

Notwithstanding the foregoing, if (1) during the last 17 days of the Lock-Up Period, the Company issues an earnings release or material news or a material event relating to the Company occurs, or (2) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the Lock-Up Period, then the restrictions imposed by this Lock-Up Letter Agreement shall continue to apply until the expiration of the 18-day period beginning on the date of issuance of the earnings release or the announcement of the material news or the occurrence of the material event, unless the Representatives agree not to require such extension in writing. The undersigned hereby further agrees that, prior to engaging in any transaction or taking any other action that is subject to the terms of this Lock-Up Letter Agreement during the period from the date of this Lock-Up Letter Agreement to and including the 34th day following the expiration of the Lock-Up Period, it will give notice thereof to the Company and will not consummate such transaction or take any such action unless it has received written confirmation from the Company that the Lock-Up Period (as such may have been extended pursuant to this paragraph) has expired.

Notwithstanding the foregoing, the undersigned may (a) transfer shares of Common Stock acquired in open market transactions by the undersigned after the completion of the Offering, (b) transfer shares of Common Stock or other securities of the Company if the transfer is (i) as a *bona fide* gift or by will or intestacy, (ii) to an immediate family member or to a trust formed for the benefit of an immediate family member, or (iii) if the undersigned is a partnership, limited liability corporation or partnership, by distribution to (A) another partnership, limited liability company or corporation that is a direct or indirect affiliate of the undersigned or (B) partners, members or shareholders of the undersigned or (c) exercise a stock option or stock purchase warrant, in each case held by the undersigned at the date of this agreement and as disclosed in the Prospectus, to acquire shares of Common Stock from the Company; provided, however, that (1) in the case of a transfer pursuant to clause (b) of this paragraph, it shall be a condition to the transfer that the transferee execute an agreement

stating that the transferee is receiving and holding the securities subject to the provisions of this Lock-Up Letter Agreement, (2) in the case of any transfer pursuant to either clause (a) or (b) of this paragraph, (x) such transfer is not required to be reported in any public report or filing with the SEC and (y) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfer and (3) in the case of an exercise of a stock option or warrant pursuant to clause (c) of this paragraph, the shares of Common Stock so acquired shall be subject to the terms of this Lock-Up Letter Agreement. For purposes of this Lock-Up Letter Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

In addition, this Lock-Up Letter Agreement shall not be deemed to restrict or prohibit: (i) the entry into or modification of a so-called "Rule 10b5-1 plan" at any time (other than the entry into or modification of such a plan in such a manner as to cause the direct or indirect sale or other disposition of shares of Common Stock within the Lock-Up Period), provided that such entry or modification is not reported in any public report or filing with the SEC by either the Company or the undersigned, and provided further that there are no transfers of shares of Common Stock under such Rule 10b5-1 plan; or (ii) the "net" exercise of outstanding warrants to purchase Common Stock or any security convertible into Common Stock in accordance with their terms; provided, however, that any Common Stock acquired upon the net exercise of warrants or conversion of any security acquired upon exercise of any warrants during the Lock-Up Period shall be subject to the restrictions imposed by this Lock-Up Letter Agreement.

In furtherance of the foregoing, the Company and its transfer agent are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Lock-Up Letter Agreement.

It is understood that, upon the earliest to occur of (i) the Representatives, on the one hand, or the Company, on the other hand, notifying the other in writing that it or they do not intend to proceed with the Offering, (ii) the registration statement filed with the SEC with respect to the Offering is withdrawn, (iii) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Stock or (iv) March 31, 2013, in the event that the Underwriting Agreement has not been executed by that date, the undersigned will, in each case, be released from its obligations under this Lock-Up Letter Agreement.

The undersigned understands that the Company and the Underwriters will proceed with the Offering in reliance on this Lock-Up Letter Agreement.

Whether or not the Offering actually occurs depends on a number of factors, including market conditions. Any Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

[Signature page follows]

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Letter Agreement and that, upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

Very truly yours,

By: _____

Name:

Title:

Dated:

Exhibit A-4

EXHIBIT B

FORM OF PRESS RELEASE

LipoScience, Inc.
[ ], 2013

LipoScience, Inc. (the "***Company***") announced today that Barclays Capital Inc., UBS Securities LLC and Piper Jaffray & Co. the joint book-running managers in the Company' s recent public sale of [ ] shares of common stock and the other underwriters of such offering whose consent is required are [waiving] [releasing] a lock-up restriction with respect to [ ] shares of the Company' s common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on [ ], 2013 and the shares may be sold or otherwise disposed of on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

EXHIBIT C-1

FORM OF OPINION OF COMPANY' S COUNSEL

Exhibit C-1-1

EXHIBIT C-2

FORM OF OPINION OF FDA COUNSEL

Exhibit C-2-1

EXHIBIT C-3

FORM OF OPINION OF INTELLECTUAL PROPERTY COUNSEL

Exhibit C-3-1

ANNEX A

FORM OF WAIVER OF LOCK-UP

[Letterhead of Barclays Capital Inc.]

LipoScience, Inc.
Public Offering of Common Stock

[ ], 2013

[*Insert Name and Address of*
Officer or Director
Requesting Waiver]

Dear Mr./Ms. [*Insert Name*]:

This letter is being delivered to you in connection with the offering by LipoScience, Inc. (the "***Company***") of 5,000,000 shares of common stock, $[0.001] par value (the "***Common Stock***"), of the Company and the lock-up letter agreement dated [ ], 2013 (the "***Lock-Up Agreement***"), executed by you in connection with such offering, and your request for a [waiver] [release] dated [ ], 2013 with respect to [ ] shares of Common Stock (the "***Shares***").

Barclays Capital Inc., UBS Securities LLC and Piper Jaffray & Co. as Representatives of the Underwriters (as defined in the Lock-Up Agreement) hereby agree (subject to the proviso below) to [waive] [release] the transfer restrictions set forth in the Lock-Up Agreement, but only with respect to the Shares, effective [*insert date*] (the "***Anticipated Effective Date***") provided, however, that such [waiver] [release] is expressly conditioned on the Company announcing the impending [waiver] [release] by issuing a press release through a major news service at least two business days before the Anticipated Effective Date. This letter will serve as notice to the Company of the impending [waiver] [release].

Except as expressly [waived] [released] hereby, the Lock-Up Agreement shall remain in full force and effect.

Yours very truly,

cc: LipoScience, Inc.

Exhibit 3.1.1

CERTIFICATE OF AMENDMENT
TO
SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
LIPOSCIENCE, INC.

LIPOSCIENCE, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "***Corporation***"), does hereby certify as of this 8th day of January, 2013:

FIRST: The name of the Corporation is **LIPOSCIENCE, INC.**

SECOND: The date on which the Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware is June 15, 2000, this Corporation being known at that time as LIPOMED, INC.

THIRD: The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware, adopted resolutions approving the amendment of the Corporation' s Second Amended and Restated Certificate of Incorporation as follows:

1. Section 4(b)(i) of Section II of Article FOURTH is hereby amended and restated in its entirety to read as follows:

"All outstanding shares of D Preferred Stocks, Series E Preferred Stock and Series F Preferred Stock shall automatically be converted into fully paid and nonassessable shares of Common Stock at the Series D Conversion Price, Series D-1 Conversion Price, Series E Conversion Price or Series F Conversion Price, as applicable, in effect at the time of conversion, immediately prior to the closing of an underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock yielding gross proceeds to the Corporation (before deducting underwriting discounts) of at least $25,000,000 (a "**Qualified Public Offering**")."

FOURTH: Thereafter, pursuant to a resolution of the Board of Directors, this Certificate of Amendment was submitted to the stockholders of the Corporation for their approval, and was duly adopted in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, LipoScience, Inc., has caused this Certificate of Amendment to be executed by its duly authorized officer this 8th day of January, 2013.

LIPOSCIENCE, INC.

By: /s/ Richard O. Brajer

Richard O. Brajer

President and Chief Executive Officer

Exhibit 3.2

CERTIFICATE OF AMENDMENT
TO
SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
LIPOSCIENCE, INC.

LIPOSCIENCE, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "***Corporation***"), does hereby certify as of this 10th day of January, 2013:

FIRST: The name of the Corporation is **LIPOSCIENCE, INC.**

SECOND: The date on which the Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware is June 15, 2000, this Corporation being known at that time as LIPOMED, INC.

THIRD: The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware, adopted resolutions approving a reverse stock split and further amending the Corporation' s Second Amended and Restated Certificate of Incorporation by inserting the following new paragraphs immediately following the first paragraph of Article FOURTH thereof:

"Effective immediately upon this Certificate of Amendment becoming effective under the General Corporation Law of the State of Delaware, and without any further action by the holders of such shares, every one outstanding share of the Corporation' s Common Stock, par value $0.001 per share ("***Common Stock***"), shall be combined into 0.485 validly issued, fully paid and non-assessable shares of Common Stock (the "***Reverse Stock Split***").

No fractional shares of Common Stock shall be issued upon combination of the Common Stock in the Reverse Stock Split. All shares of Common Stock so combined that are held by a stockholder shall be aggregated subsequent to the foregoing Reverse Stock Split. If the Reverse Stock Split would result in the issuance of any fractional share, the Corporation shall, in lieu of issuing any fractional share, pay cash equal to the product of such fraction multiplied by the fair market value of one share of Common Stock (as determined by the Board of Directors) on the date that the Reverse Stock Split is effective, rounded up to the nearest whole cent.

The par value of each share of Common Stock shall not be adjusted in connection with the Reverse Stock Split. All of the share amounts, amounts per share and per share numbers for the Common Stock and each series of Preferred Stock, par value $0.001 per share, set forth in the Corporation' s Second Amended and Restated Certificate of Incorporation, as amended to date, shall be appropriately adjusted to give effect to the Reverse Stock Split, as applicable."

FOURTH: Thereafter, pursuant to a resolution of the Board of Directors, this Certificate of Amendment was submitted to the stockholders of the Corporation for their approval, and was duly adopted in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, LipoScience, Inc., has caused this Certificate of Amendment to be executed by its duly authorized officer this 10th day of January, 2013.

LIPOSCIENCE, INC.

By: /s/ Richard O. Brajer
Richard O. Brajer
President and Chief Executive Officer

Exhibit 3.3

THIRD AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
LIPOSCIENCE, INC.

LIPOSCIENCE, INC., a corporation organized and existing under the laws of the State of Delaware (the "***Corporation***"), does hereby certify as follows:

FIRST: The name of the Corporation is LipoScience, Inc.

SECOND: The Corporation' s original Certificate of Incorporation (the "***Original Certificate***") was filed with the Secretary of State of the State of Delaware (the "***Delaware Secretary of State***") on June 15, 2000 under the name LIPOMED, INC. The Original Certificate, as amended, was amended and restated by the Amended and Restated Certificate of Incorporation (the "***First Restated Certificate***") filed with the Delaware Secretary of State on May 7, 2003. The First Restated Certificate, as amended, was further amended and restated by the Second Amended and Restated Certificate of Incorporation (the "***Second Restated Certificate***") filed with the Delaware Secretary of State on August 2, 2006. The Second Restated Certificate was amended by Certificates of Amendment filed with the Delaware Secretary of State on each of December 12, 2006, February 7, 2008, March 30, 2011, January 8, 2013 and January 10, 2013.

THIRD: This Third Amended and Restated Certificate of Incorporation has been duly adopted and approved by the Board of Directors of the Corporation.

FOURTH: This Third Amended and Restated Certificate of Incorporation was approved by the holders of the requisite number of shares of the Corporation in accordance with Section 228 of the Delaware General Corporate Law ("***DGCL***"). This Third Amended and Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Sections 242 and 245 of the DGCL by the Board of Directors and the stockholders of the Corporation.

FIFTH: This Third Amended and Restated Certificate of Incorporation so adopted reads in full as set forth in Exhibit A attached hereto and is incorporated herein by reference in its entirety.

* * * *

IN WITNESS WHEREOF, LipoScience, Inc. has caused this Third Amended and Restated Certificate of Incorporation to be signed by its duly authorized officer on this _____ day of January, 2013.

LIPOSCIENCE, INC.

By:_____
Richard O. Brajer
President and Chief Executive Officer

Exhibit A

LIPOSCIENCE, INC.

THIRD AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION

I.

The name of the Corporation is **LIPOSCIENCE, INC.**

II.

The address of the registered office of the Corporation in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware 19808, and the name of the registered agent of the Corporation in the State of Delaware at such address is Corporation Service Company.

III.

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the DGCL.

IV.

A. The Corporation is authorized to issue two classes of stock to be designated, respectively, "***Common Stock***" and "***Preferred Stock***." The total number of shares which the Corporation is authorized to issue is eighty million (80,000,000) shares. Seventy-five million (75,000,000) shares shall be Common Stock, each having a par value of one-tenth of one cent ($0.001). Five million (5,000,000) shares shall be Preferred Stock, each having a par value of one-tenth of one cent ($0.001).

B. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors is hereby expressly authorized to provide for the issue of the shares of the Preferred Stock in one or more series, and to fix the number of shares and to determine or alter for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issuance of such shares and as may be permitted by the DGCL. The Board of Directors is also expressly authorized to increase or decrease the number of shares of any series subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of

shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of the stock of the Corporation entitled to vote thereon, without a separate vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any certificate of designation filed with respect to any series of Preferred Stock.

C. Each outstanding share of Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; *provided, however*, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Third Amended and Restated Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon by law or pursuant to this Third Amended and Restated Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock).

V.

For the management of the business and for the conduct of the affairs of the Corporation, and in further definition, limitation and regulation of the powers of the Corporation, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. MANAGEMENT OF BUSINESS. The management of the business and the conduct of the affairs of the Corporation shall be vested in its Board of Directors.

B. BOARD OF DIRECTORS.

1. Number. The number of directors which shall constitute the Board of Directors shall be fixed exclusively by resolutions adopted by a majority of the authorized number of directors constituting the Board of Directors.

2. Term. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, following the closing of the initial public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "***1933 Act***"), covering the offer and sale of Common Stock to the public (the "***Initial Public Offering***"), the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. The Board of Directors is authorized to assign members of the Board of Directors already in office to such classes at the time the classification becomes effective. At the first annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At

each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting. Notwithstanding the foregoing provisions of this section, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

3. Removal of Directors

a. Subject to the rights of any series of Preferred Stock to elect additional directors under specified circumstances, following the closing of the Initial Public Offering, neither the Board of Directors nor any individual director may be removed without cause.

b. Subject to any limitation imposed by law, any individual director or directors may be removed with cause by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all then-outstanding shares of capital stock of the Corporation entitled to vote generally at an election of directors.

4. Vacancies. Subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes, and any newly created directorships resulting from any increase in the number of directors, shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by the stockholders, except as otherwise provided by law, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director' s successor shall have been elected and qualified.

C. BYLAW AMENDMENTS. The Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the Corporation. Any adoption, amendment or repeal of the Bylaws of the Corporation by the Board shall require the approval of a majority of the authorized number of directors. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the Corporation; *provided, however,* that, in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Third Amended and Restated Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class.

D. WRITTEN BALLOTS. The directors of the Corporation need not be elected by written ballot unless the Bylaws so provide.

E. ACTION BY STOCKHOLDERS. No action shall be taken by the stockholders of the Corporation except at an annual or special meeting of stockholders called in accordance with the Bylaws or by written consent or electronic transmission of stockholders in accordance with the Bylaws prior to the closing of the Initial Public Offering and, following the closing of the Initial Public Offering, no action shall be taken by the stockholders by written consent or electronic transmission.

F. ADVANCE NOTICE. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Corporation shall be given in the manner provided in the Bylaws of the Corporation.

VI.

A. The liability of the directors for monetary damages shall be eliminated to the fullest extent under applicable law. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated to the fullest extent permitted by the DGCL, as so amended.

B. Any repeal or modification of this Article VI shall be prospective and shall not affect the rights under this Article VI in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification.

VII.

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation; (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation' s stockholders; (iii) any action asserting a claim against the Corporation arising pursuant to any provision of the DGCL, the Third Amended and Restated Certificate of Incorporation or the Bylaws of the Corporation; or (iv) any action asserting a claim against the Corporation governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and to have consented to the provisions of this Article VII.

VIII.

A. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Third Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute, except as provided in paragraph B. of this Article VIII, and all rights conferred upon the stockholders herein are granted subject to this reservation.

B. Notwithstanding any other provisions of this Third Amended and Restated Certificate of Incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of the Corporation required by law or by this Third Amended and Restated Certificate of Incorporation or any certificate of designation filed with respect to a series of Preferred Stock, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to alter, amend or repeal Articles V, VI, VII and VIII.

* * * *

Exhibit 4.2

LipoScience, Inc.

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH SHAREHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE CERTIFICATE OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS OR HER LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	- as tenants in common	UNIF GIFT MIN ACT	- ..... (Cust) Custodian ..... (Minor) under Uniform Gifts to Minors Act ..... (State)
TEN ENT	- as tenants by the entireties		
JT TEN	- as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACT	- ..... (Cust) Custodian (until age .....) ..... (Minor) under Uniform Transfers to Minors Act ..... (State)

Additional abbreviations may also be used though not in the above list.

For value received, _____ hereby sell, assign and transfer unto

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

_____

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

_____

_____

_____ Shares

of the common stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____ Attorney

to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated: _____ 20____

Signature: _____

Signature: _____

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Signature(s) Guaranteed: Medallion Guarantee Stamp

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15.

SECURITY INSTRUCTIONS

THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.

The IRS requires that we report the cost basis of certain shares acquired after January 1, 2011. If your shares were covered by the legislation and you have sold or transferred the shares and requested a specific cost basis calculation method, we have processed as requested. If you did not specify a cost basis calculation method, we have defaulted to the first in, first out (FIFO) method. Please visit our website or consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with us or do not have any activity in your account for the time periods specified by state law, your property could become subject to state unclaimed property laws and transferred to the appropriate state.

Exhibit 5.1

Brent B. Siler
T: +1 703 456 8058
bsiler@cooley.com

January 10, 2013

LipoScience, Inc.
2500 Sumner Boulevard
Raleigh, NC 27616

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by LipoScience, Inc., a Delaware corporation (the "***Company***") of a Registration Statement (No. 333-175102) on Form S-1 (the "***Registration Statement***") with the Securities and Exchange Commission, including a related prospectus filed with the Registration Statement (the "***Prospectus***"), covering an underwritten public offering of up to 5,750,000 shares of common stock (the "***Shares***"), including 750,000 shares for which the underwriters have been granted an option to purchase.

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related Prospectus, (b) the Company' s Second Amended and Restated Certificate of Incorporation, as amended to date and as currently in effect, filed as Exhibits 3.1, 3.1.1 and 3.2 to the Registration Statement, (c) the Company' s Bylaws, as amended to date and as currently in effect, filed as Exhibit 3.4 to the Registration Statement, (d) the Company' s Amended and Restated Certificate of Incorporation, filed as Exhibit 3.3 to the Registration Statement, which will be in effect upon the closing of the offering contemplated by the Registration Statement, (e) the Company' s Amended and Restated Bylaws, filed as Exhibit 3.5 to the Registration Statement, which will be in effect upon the closing of the offering contemplated by the Registration Statement, and (f) the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals and the conformity to originals of all documents where due execution and delivery are a prerequisite to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of officers of the Company and have not sought to independently verify such matters. Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares have been duly authorized by the Company and, when sold and issued in accordance with the Registration Statement and the related Prospectus, will be validly issued, fully paid and non-assessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

COOLEY LLP

By: /s/ Brent B. Siler
Brent B. Siler

ONE FREEDOM SQUARE, RESTON TOWN CENTER, 11951 FREEDOM DRIVE, RESTON, VA 20190-5656 T: (703) 456-8000 F: (703) 456-8100
WWW.COOLEY.COM

Exhibit 10.1

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT (as the same may from time to time be amended, modified, supplemented or restated, this "**Agreement**") dated as of December 20, 2012 (the "**Effective Date**") among OXFORD FINANCE LLC, a Delaware limited liability company with an office located at 133 North Fairfax Street, Alexandria, Virginia 22314 ("**Oxford**"), as collateral agent (in such capacity, "**Collateral Agent**"), the Lenders listed on Schedule 1.1 hereof or otherwise a party hereto from time to time including Oxford in its capacity as a Lender and SQUARE 1 BANK, a North Carolina banking corporation with an office located at 406 Blackwell Street, Suite 240, Durham, NC 27701 ("**Bank**" or "**Square 1**") (each a "**Lender**" and collectively, the "**Lenders**"), and LIPOSCIENCE, INC., a Delaware corporation with offices located at 2500 Sumner Boulevard, Raleigh, NC 27616 ("**Borrower**"), provides the terms on which the Lenders shall lend to Borrower and Borrower shall repay the Lenders. The parties agree as follows:

1. ACCOUNTING AND OTHER TERMS

1.1 Accounting terms not defined in this Agreement shall be construed in accordance with GAAP. Calculations and determinations must be made in accordance with GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. All references to "**Dollars**" or "**$**" are United States Dollars, unless otherwise noted.

2. LOANS AND TERMS OF PAYMENT

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay each Lender, the outstanding principal amount of all Credit Extensions advanced to Borrower by such Lender and accrued and unpaid interest thereon and any other amounts due hereunder as and when due in accordance with this Agreement.

2.2 Credit Extensions.

(a) **Term Loans.**

(i) Availability. Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, to make term loans to Borrower on the Effective Date in an aggregate amount of Sixteen Million Dollars ($16,000,000.00) according to each Lender' s Term Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a "**Term Loan**", and collectively as the "**Term Loans**"). After repayment, no Term Loan may be re-borrowed.

(ii) Repayment. Borrower shall make monthly payments of interest only commencing on the first (1st) Payment Date following the Funding Date of the Term Loan, and continuing on the Payment Date of each successive month thereafter through and including the Payment Date immediately preceding the Amortization Date. Borrower agrees to pay, on the Funding Date of the Term Loan, any initial partial monthly interest payment otherwise due for the period between the Funding Date of the Term Loan and the first Payment Date thereof. Commencing on the Amortization Date, and continuing on the Payment Date of each month thereafter, Borrower shall make consecutive equal monthly payments of principal and interest, in arrears, to each Lender, as calculated by Collateral Agent (which calculations shall be deemed correct absent manifest error) based upon: (1) the amount of such Lender' s Term Loan, (2) the effective rate of interest, as determined in Section 2.3(a), and (3) a repayment schedule equal to thirty (30) months. All unpaid principal and accrued and unpaid interest with respect to the Term Loan is due and payable in full on the Maturity Date. The Term Loan may only be prepaid in accordance with Sections 2.2(a)(iii) and 2.2(a)(iv).

(iii) Mandatory Prepayments. If the Term Loans are accelerated following the occurrence of an Event of Default, Borrower shall immediately pay to Lenders, payable to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of: (i) all outstanding principal of the Term Loans plus accrued and unpaid interest thereon through the prepayment date, (ii) the Final Payment, (iii) the Prepayment Fee, plus (iv) all other Obligations that are due and payable, including Lenders' Expenses and interest at

the Default Rate with respect to any past due amounts. Notwithstanding (but without duplication with) the foregoing, on the Maturity Date, if the Final Payment had not previously been paid in full in connection with the prepayment of the Term Loans in full, Borrower shall pay to Collateral Agent, for payment to each Lender in accordance with its respective Pro Rata Share, the Final Payment in respect of the Term Loans.

(iv) Permitted Prepayment of Term Loans. Borrower shall have the option to prepay all, but not less than all, of the Term Loans advanced by the Lenders under this Agreement, provided Borrower (i) provides written notice to Collateral Agent of its election to prepay the Term Loans at least thirty (30) days prior to such prepayment, and (ii) pays to the Lenders on the date of such prepayment, payable to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of (A) all outstanding principal of the Term Loans plus accrued and unpaid interest thereon through the prepayment date, (B) the Final Payment, (C) the Prepayment Fee, plus (D) all other Obligations that are due and payable, including Lenders' Expenses and interest at the Default Rate with respect to any past due amounts.

(b) **Advances Under Revolving Line**.

(i) Amount. Subject to and upon the terms and conditions of this Agreement, including an audit of the Collateral, the results of which must be reasonably satisfactory to Bank in its sole discretion, (1) Borrower may request Advances from Bank in an aggregate outstanding principal amount not to exceed the lesser of (A) the Revolving Line or (B) the Borrowing Base, less any amounts outstanding under the Ancillary Services Sublimit, and (2) amounts borrowed pursuant to this Section 2.2(b)(i) may be repaid and reborrowed at any time prior to the Revolving Maturity Date, at which time all Advances under this Section 2.2(b)(i) shall be immediately due and payable. Borrower may prepay any Advances without penalty or premium.

(ii) Form of Request. Whenever Borrower desires an Advance, Borrower will notify Bank by facsimile transmission, telephone or email no later than 5:30 p.m. Eastern time (4:30 p.m. Eastern time for wire transfers), on the Business Day that the Advance is to be made. Each such notification shall be promptly confirmed by a Loan Advance/Paydown Request Form in substantially the form of Exhibit B-2. Bank is authorized to make Advances under this Agreement, based upon instructions received from a Responsible Officer or a designee of a Responsible Officer, or without instructions if in Bank' s reasonable discretion such Advances are necessary to meet Obligations which have become due and remain unpaid. Bank shall be entitled to rely on any telephonic or email notice given by a person whom Bank reasonably believes to be a Responsible Officer or a designee thereof, and Borrower shall indemnify and hold Bank harmless for any damages or loss suffered by Bank as a result of such reliance. Bank will credit the amount of Advances made under this Section 2.2(b) to Borrower' s Designated Deposit Account.

(iii) Ancillary Services Sublimit. Subject to the availability under the Revolving Line, at any time and from time to time from the date hereof through the Business Day immediately prior to the Revolving Maturity Date, Borrower may request the provision of Ancillary Services from Bank. The aggregate limit of the Ancillary Services shall not exceed the Ancillary Services Sublimit, provided that availability under the Revolving Line shall be reduced by the aggregate limits of any outstanding and undrawn amounts under all Letters of Credit issued hereunder. In addition, Bank may, in its sole discretion, charge as Advances any amounts for which Bank becomes liable to third parties in connection with the provision of the Ancillary Services. The terms and conditions (including repayment and fees) of such Ancillary Services shall be subject to the terms and conditions of the Bank' s standard forms of application and agreement for the applicable Ancillary Services, which Borrower hereby agrees to execute.

(iv) Collateralization of Obligations Extending Beyond Maturity. If Borrower has not secured to Bank' s reasonable satisfaction its obligations with respect to any Letters of Credit by the Revolving Maturity Date, then, effective as of such date, the balance in any deposit accounts held by Bank and the certificates of deposit or time deposit accounts issued by Bank in Borrower' s name (and any interest paid thereon or proceeds thereof, including any amounts payable upon the maturity or liquidation of such certificates or accounts), shall automatically secure such obligations to the extent of the then continuing or outstanding and undrawn Letters of Credit. Borrower authorizes Bank to hold such balances in pledge and to decline to honor any drafts thereon or any requests by Borrower or any other Person to pay or otherwise transfer any part of such balances for so long as the Letters of Credit are outstanding or continue.

(c) Overadvances. If the aggregate amount of the outstanding Advances (including the Ancillary Services Sublimit) exceeds the lesser of the Revolving Line or the Borrowing Base at any time, Borrower shall immediately pay to Bank, in cash, the amount of such excess.

2.3 Payment of Interest on the Credit Extensions.

(a) Interest Rates.

(i) Term Loans. Subject to Section 2.3(b), the principal amount outstanding under the Term Loans shall accrue interest at a fixed per annum rate (which rate shall be fixed for the duration of the applicable Term Loan) equal to nine and one-half percent (9.50%), which interest shall be payable monthly in arrears in accordance with Sections 2.2(a) and 2.3(e) . Interest shall accrue on each Term Loan commencing on, and including, the Funding Date of such Term Loan, and shall accrue on the principal amount outstanding under such Term Loan through and including the day on which such Term Loan is paid in full.

(ii) Advances. Subject to Section 2.3(b), the Advances shall bear interest, on the outstanding daily balance thereof, at a variable annual rate equal to the greater of (x) 3.00% above the Prime Rate then in effect, or (y) 6.25%.

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, Obligations shall accrue interest at a fixed per annum rate equal to the rate that is otherwise applicable thereto plus five percentage points (5.00%) (the "**Default Rate**"). Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Collateral Agent.

(c) 360-Day Year. Interest shall be computed on the basis of a three hundred sixty (360) day year consisting of twelve (12) months of thirty (30) days.

(d) Debit of Accounts. Collateral Agent and each Lender may debit (or ACH) any deposit accounts, maintained by Borrower or any of its Subsidiaries, including the Designated Deposit Account, for principal and interest payments or any other amounts Borrower owes the Lenders under the Loan Documents when due. Any such debits (or ACH activity) shall not constitute a set-off.

(e) Payments. Except as otherwise expressly provided herein, all payments by Borrower under the Loan Documents shall be made to the respective Lender to which such payments are owed, at such Lender' s office in immediately available funds on the date specified herein. Unless otherwise provided, interest is payable monthly on the Payment Date of each month. Payments of principal and/or interest received after 12:00 noon Eastern time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment is due the next Business Day and additional fees or interest, as applicable, shall continue to accrue until paid. All payments to be made by Borrower hereunder or under any other Loan Document, including payments of principal and interest, and all fees, expenses, indemnities and reimbursements, shall be made without set-off, recoupment or counterclaim, in lawful money of the United States and in immediately available funds.

(f) Changes to the Prime Rate. In the event the Prime Rate is changed from time to time hereafter, the applicable rate of interest with respect to the Advances hereunder shall be increased or decreased, effective as of the day the Prime Rate is changed, by an amount equal to such change in the Prime Rate.

2.4 Secured Promissory Notes. The Term Loans and the Advances shall be evidenced by a Secured Promissory Note or Notes in the form attached as Exhibit E hereto (each a "**Secured Promissory Note**"), and shall be repayable as set forth in this Agreement. Borrower irrevocably authorizes each Lender to make or cause to be made, on or about the Funding Date of the Term Loans and any Advance or at the time of receipt of any payment of principal on such Lender' s Secured Promissory Note, an appropriate notation on such Lender' s Secured Promissory Note Record reflecting the making of such Term Loan or Advance or (as the case may be) the receipt of such payment. The outstanding amount of each Term Loan and the Advances set forth on such Lender' s Secured

Promissory Note Record shall be prima facie evidence of the principal amount thereof owing and unpaid to such Lender, but the failure to record, or any error in so recording, any such amount on such Lender' s Secured Promissory Note Record shall not limit or otherwise affect the obligations of Borrower under any Secured Promissory Note or any other Loan Document to make payments of principal of or interest on any Secured Promissory Note when due. Upon receipt of an affidavit of an officer of a Lender as to the loss, theft, destruction, or mutilation of its Secured Promissory Note**,** Borrower shall issue, in lieu thereof, a replacement Secured Promissory Note in the same principal amount thereof and of like tenor.

2.5 Fees. Borrower shall pay to the Lenders, as indicated:

(a) Facility Fee. A fully earned, non-refundable facility fee of One Hundred Twenty Thousand Dollars ($120,000.00) to be shared between the Lenders in the amount of One Hundred Thousand Dollars ($100,000.00) for the account of Oxford, and Twenty Thousand Dollars ($20,000.00) for the account of Square 1; shall be due and payable on the Effective Date; receipt of which Lenders hereby acknowledge.

(b) Final Payment. The Final Payment, when due hereunder;

(c) Prepayment Fee. The Prepayment Fee, when due hereunder, to be shared between the Lenders in accordance with their respective Pro Rata Shares;

(d) Unused Fee. A fee, payable quarterly in arrears, in an amount equal to one quarter of one percent (0.25%) per annum of the average unused portion of the Revolving Line, as reasonably determined by, and for the sole account of, Square 1; and

(e) Lenders' Expenses. All Lenders' Expenses (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due.

2.6 Withholding. Payments received by the Lenders from Borrower hereunder will be made free and clear of and without deduction for any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any governmental authority (including any interest, additions to tax or penalties applicable thereto). Specifically, however, if at any time any Governmental Authority, applicable law, regulation or international agreement requires Borrower to make any withholding or deduction from any such payment or other sum payable hereunder to the Lenders, Borrower hereby covenants and agrees that the amount due from Borrower with respect to such payment or other sum payable hereunder will be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, each Lender receives a net sum equal to the sum which it would have received had no withholding or deduction been required and Borrower shall pay the full amount withheld or deducted to the relevant Governmental Authority. Borrower will, upon request, furnish the Lenders with proof reasonably satisfactory to the Lenders indicating that Borrower has made such withholding payment; provided, however, that Borrower need not make any withholding payment if the amount or validity of such withholding payment is contested in good faith by appropriate and timely proceedings and as to which payment in full is bonded or reserved against by Borrower. The agreements and obligations of Borrower contained in this Section 2.6 shall survive the termination of this Agreement.

3. CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Each Lender' s obligation to make a Credit Extension is subject to the condition precedent that Collateral Agent and each Lender shall consent to or shall have received, in form and substance satisfactory to Collateral Agent and each Lender, such documents, and completion of such other matters, as Collateral Agent and each Lender may reasonably deem necessary or appropriate, including, without limitation:

(a) original Loan Documents, each duly executed by Borrower and each Subsidiary, as applicable;

(b) duly executed original Control Agreements with respect to any Collateral Accounts maintained by Borrower or any of its Subsidiaries;

(c) duly executed original Secured Promissory Notes in favor of each Lender;

(d) the Operating Documents and good standing certificates of Borrower and its Subsidiaries certified by the Secretary of State (or equivalent agency) of Borrower' s and such Subsidiaries' jurisdiction of organization or formation and each jurisdiction in which Borrower and each Subsidiary is qualified to conduct business, each as of a date no earlier than thirty (30) days prior to the Effective Date;

(e) a completed Perfection Certificate for Borrower and each of its Subsidiaries;

(f) the Annual Projections, for the current calendar year;

(g) duly executed original officer' s certificate for Borrower and each Subsidiary that is a party to the Loan Documents, in a form acceptable to Collateral Agent and the Lenders;

(h) certified copies, dated as of date no earlier than thirty (30) days prior to the Effective Date, of financing statement searches, as Collateral Agent shall request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(i) a landlord' s consent executed in favor of Collateral Agent in respect of all of Borrower' s and each Subsidiaries' leased locations;

(j) a bailee waiver executed in favor of Collateral Agent in respect of each third party bailee where Borrower or any Subsidiary maintains Collateral having a book value in excess of Two Hundred Fifty Thousand Dollars ($250,000.00), other than with respect to the following locations: (i) Mayo Foundation for Medical Education and Research, 3050 Superior Drive NW, Rochester, Minnesota 55901 and (ii) Laboratory Corporation of America Holdings, 531 South Spring Street, Burlington, North Carolina 27215.

(k) a report outlining the location of all Vantera machines;

(l) a duly executed legal opinion of counsel to Borrower dated as of the Effective Date;

(m) evidence reasonably satisfactory to Collateral Agent and the Lenders that the insurance policies required by Section 6.5 hereof are in full force and effect, together with appropriate evidence showing loss payable and/or additional insured clauses or endorsements in favor of Collateral Agent, for the ratable benefit of the Lenders;

(n) a copy of any applicable Registration Rights Agreement or Investors' Rights Agreement and any amendments thereto;

(o) a payoff letter from Square 1 Bank in respect of the Existing Indebtedness;

(p) evidence that (i) the Liens securing the Existing Indebtedness will be terminated and (ii) the documents and/or filings evidencing the perfection of such Liens, including without limitation any financing statements and/or control agreements, have or will, concurrently with the initial Credit Extension, be terminated; and

(q) payment of the fees and Lenders' Expenses then due as specified in Section 2.5 hereof.

3.2 Conditions Precedent to all Credit Extensions. The obligation of each Lender to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) receipt by (i) the Lenders of an executed Disbursement Letter in the form of Exhibit B-1 attached hereto; and (ii) Square 1 of an executed Loan Advance/Paydown Request Form in the form of Exhibit B-2 attached hereto;

(b) the representations and warranties in Section 5 hereof shall be true, accurate and complete in all material respects on the date of the Disbursement Letter (and the Loan Advance/Paydown Request Form) and on the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, and no Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Borrower' s representation and warranty on that date that the representations and warranties in Section 5 hereof are true, accurate and complete in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(c) in such Lender' s sole discretion, there has not been any Material Adverse Change or any material adverse deviation by Borrower from the Annual Projections of Borrower presented to and accepted by Collateral Agent and each Lender;

(d) to the extent not delivered at the Effective Date, duly executed original Secured Promissory Notes and Warrants, in number, form and content acceptable to each Lender, and in favor of each Lender according to its Commitment Percentage, with respect to each Credit Extension made by such Lender after the Effective Date; and

(e) payment of the fees and Lenders' Expenses then due as specified in Section 2.5 hereof.

3.3 Covenant to Deliver. Borrower agrees to deliver to Collateral Agent and the Lenders each item required to be delivered to Collateral Agent under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Collateral Agent or any Lender of any such item shall not constitute a waiver by Collateral Agent or any Lender of Borrower' s obligation to deliver such item, and any such Credit Extension in the absence of a required item shall be made in each Lender' s sole discretion.

3.4 Procedures for Borrowing. Subject to the prior satisfaction of all other applicable conditions to the making of a Term Loan set forth in this Agreement, to obtain a Term Loan, Borrower shall notify the Lenders (which notice shall be irrevocable) by electronic mail, facsimile, or telephone by 12:00 noon Eastern time three (3) Business Days prior to the date the Term Loan is to be made. Together with any such electronic, facsimile or telephonic notification, Borrower shall deliver to the Lenders by electronic mail or facsimile a completed Disbursement Letter (and the Loan Advance/Paydown Request Form, with respect to Square 1) executed by a Responsible Officer or his or her designee. The Lenders may rely on any telephone notice given by a person whom a Lender reasonably believes is a Responsible Officer or designee. On the Funding Date, each Lender shall credit and/or transfer (as applicable) to the Designated Deposit Account, an amount equal to its Term Loan Commitment.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower hereby grants Collateral Agent, for the ratable benefit of the Lenders, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Collateral Agent, for the ratable benefit of the Lenders, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral, subject only to Permitted Liens that are permitted by the terms of this Agreement to have priority to Collateral Agent' s Lien. If Borrower shall acquire a commercial tort claim (as defined in the Code), Borrower, shall promptly notify Collateral Agent in a writing signed by Borrower, as the case may be, of the general details thereof (and further details as may be required by Collateral Agent) and grant to Collateral Agent, for the ratable benefit of the Lenders, in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Collateral Agent.

If this Agreement is terminated, Collateral Agent' s Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than inchoate indemnity obligations) and at such time as the Lenders' obligation to make Credit Extensions has terminated, Collateral Agent shall, at the sole cost and expense of Borrower, promptly release its Liens in the Collateral and all rights therein shall revert to Borrower.

4.2 Authorization to File Financing Statements. Borrower hereby authorizes Collateral Agent to file financing statements or take any other action required to perfect Collateral Agent' s security interests in the Collateral, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Collateral Agent' s interest or rights under the Loan Documents, including a notice that any disposition of the Collateral, except to the extent permitted by the terms of this Agreement, by Borrower, or any other Person, shall be deemed to violate the rights of Collateral Agent under the Code.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants to Collateral Agent and the Lenders as follows at all times:

5.1 Due Organization, Authorization: Power and Authority. Borrower and each of its Subsidiaries is duly existing and in good standing as a Registered Organization in its jurisdictions of organization or formation and Borrower and each of its Subsidiaries is qualified and licensed to do business and is in good standing in any jurisdiction in which the conduct of its businesses or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a Material Adverse Change. In connection with this Agreement, Borrower and each of its Subsidiaries has delivered to Collateral Agent a completed perfection certificate signed by an officer of Borrower or such Subsidiary (each a "**Perfection Certificate**" and collectively, the "**Perfection Certificates**"). Borrower represents and warrants that (a) Borrower and each of its Subsidiaries' exact legal name is that which is indicated on its respective Perfection Certificate and on the signature page of each Loan Document to which it is a party; (b) Borrower and each of its Subsidiaries is an organization of the type and is organized in the jurisdiction set forth on its respective Perfection Certificate; (c) each Perfection Certificate accurately sets forth each of Borrower' s and its Subsidiaries' organizational identification number or accurately states that Borrower or such Subsidiary has none; (d) each Perfection Certificate accurately sets forth Borrower' s and each of its Subsidiaries' place of business, or, if more than one, its chief executive office as well as Borrower' s and each of its Subsidiaries' mailing address (if different than its chief executive office); (e) Borrower and each of its Subsidiaries (and each of its respective predecessors) have not, in the past five (5) years, changed its jurisdiction of organization, organizational structure or type, or any organizational number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificates pertaining to Borrower and each of its Subsidiaries, is accurate and complete (it being understood and agreed that Borrower and each of its Subsidiaries may from time to time update certain information in the Perfection Certificates (including the information set forth in clause (d) above) after the Effective Date to the extent permitted by one or more specific provisions in this Agreement); such updated Perfection Certificates subject to the review and approval of Collateral Agent. If Borrower or any of its Subsidiaries is not now a Registered Organization but later becomes one, Borrower shall notify Collateral Agent of such occurrence and provide Collateral Agent with such Person' s organizational identification number within five (5) Business Days of receiving such organizational identification number.

The execution, delivery and performance by Borrower and each of its Subsidiaries of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower' s or such Subsidiaries' organizational documents, including its respective Operating Documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law applicable thereto, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or such Subsidiary, or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect) or are being obtained pursuant to Section 6.1(b), or (v) constitute an event of default under any material agreement by which Borrower or any of such Subsidiaries, or their respective properties, is bound. Neither Borrower nor any of its Subsidiaries is in default under any agreement to which it is a party or by which it or any of its assets is bound in which such default could reasonably be expected to have a Material Adverse Change.

5.2 Collateral.

(a) Borrower and each its Subsidiaries have good title to, have rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien under the Loan Documents, free and clear of any and all Liens except Permitted Liens, and neither Borrower nor any of its Subsidiaries have any Deposit Accounts, Securities Accounts, Commodity Accounts or other investment accounts other than the Collateral Accounts or the other investment accounts, if any, described in the Perfection Certificates delivered to Collateral Agent in connection herewith with respect of which Borrower or such Subsidiary has given Collateral Agent notice and taken such actions as are necessary to give Collateral Agent a perfected security interest therein. The Accounts are bona fide, existing obligations of the Account Debtors.

(b) On the Effective Date, and except as disclosed on the Perfection Certificate (i) the Collateral is not in the possession of any third party bailee (such as a warehouse), and (ii) no such third party bailee possesses components of the Collateral in excess of Two Hundred Fifty Thousand Dollars ($250,000.00). None of the components of the Collateral shall be maintained at locations other than as disclosed in the Perfection Certificates on the Effective Date or as permitted pursuant to Section 6.11.

(c) All Inventory is in all material respects of good and marketable quality, free from material defects. The Eligible Accounts are bona fide existing obligations. The property or services giving rise to such Eligible Accounts has been delivered or rendered to the account debtor or its agent for immediate shipment to and unconditional acceptance by the account debtor. Borrower has not received notice of actual or imminent Insolvency Proceeding of any account debtor whose accounts are included in any Borrowing Base Certificate as an Eligible Account.

(d) Borrower and each of its Subsidiaries is the sole owner or exclusive licensee of the Intellectual Property each respectively purports to own or exclusively license, free and clear of all Liens other than Permitted Liens. Except as noted on the Perfection Certificates, neither Borrower nor any of its Subsidiaries is a party to, nor is bound by, any material license or other material agreement with respect to which Borrower or such Subsidiary is the licensee that (i) prohibits or otherwise restricts Borrower or its Subsidiaries from granting a security interest in Borrower' s or such Subsidiaries' interest in such material license or material agreement or any other property, or (ii) for which a default under or termination of could interfere with Collateral Agent' s or any Lender' s right to sell any Collateral. Borrower shall provide written notice to Collateral Agent and each Lender within ten (10) days of Borrower or any of its Subsidiaries entering into or becoming bound by any license or agreement with respect to which Borrower or any Subsidiary is the licensee (other than over-the-counter software that is commercially available to the public). Borrower shall, and shall cause its Subsidiaries to, take such commercially reasonable steps as Collateral Agent and any Lender requests to obtain the consent of, or waiver by, any Person whose consent or waiver is necessary for (i) all material licenses or agreements, as determined by Collateral Agent, with respect to which Borrower or any Subsidiary is the licensee to be deemed "**Collateral**" and for Collateral Agent and each Lender to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such license or agreement, whether now existing or entered into in the future, and (ii) Collateral Agent and each Lender shall have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Collateral Agent' s and such Lender' s rights and remedies under this Agreement and the other Loan Documents.

5.3 Litigation. Except as disclosed (i) on the Perfection Certificates, or (ii) in accordance with Section 6.9 hereof, there are no actions, suits, investigations, or proceedings pending or, to the knowledge of the Responsible Officers, threatened in writing by or against Borrower or any of its Subsidiaries which could reasonably be expected to result in damages or costs to Borrower or any of its Subsidiaries of more than Two Hundred and Fifty Thousand Dollars ($250,000.00).

5.4 No Material Deterioration in Financial Condition; Financial Statements. All consolidated financial statements for Borrower and its Subsidiaries, delivered to Collateral Agent fairly present, in conformity with GAAP, in all material respects the consolidated financial condition of Borrower and its Subsidiaries, and the consolidated results of operations of Borrower and its Subsidiaries. There has not been any material deterioration in the consolidated financial condition of Borrower and its Subsidiaries since the date of the most recent financial statements submitted to any Lender.

5.5 Solvency. Borrower and each of its Subsidiaries is Solvent.

5.6 Regulatory Compliance. Neither Borrower nor any of its Subsidiaries is an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Neither Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither Borrower nor any of its Subsidiaries has violated any laws, ordinances or rules, the violation of which could reasonably be expected to have a Material Adverse Change. Neither Borrower' s nor any of its Subsidiaries' properties or assets has been used by Borrower or such Subsidiary or, to Borrower' s knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

None of Borrower, any of its Subsidiaries, or any of Borrower' s or its Subsidiaries' Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is a Blocked Person. None of Borrower, any of its Subsidiaries, or to the knowledge of Borrower and any of their Affiliates or agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law.

5.7 Investments. Neither Borrower nor any of its Subsidiaries owns any stock, shares, partnership interests or other equity securities except for Permitted Investments.

5.8 Tax Returns and Payments; Pension Contributions. Borrower and each of its Subsidiaries has timely filed all required tax returns and reports, and Borrower and each of its Subsidiaries, has timely paid all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower and such Subsidiaries, in all jurisdictions in which Borrower or any such Subsidiary is subject to taxes, including the United States, unless such taxes are being contested in accordance with the following sentence. Borrower and each of its Subsidiaries, may defer payment of any contested taxes, provided that Borrower or such Subsidiary, (a) in good faith contests its obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted, (b) notifies Collateral Agent in writing of the commencement of, and any material development in, the proceedings, and (c) posts bonds or takes any other steps required to prevent the Governmental Authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "**Permitted Lien**." Neither Borrower nor any of its Subsidiaries is aware of any claims or adjustments proposed for any of Borrower' s or such Subsidiaries' , prior tax years which could result in additional taxes becoming due and payable by Borrower or its Subsidiaries. Borrower and each of its Subsidiaries have paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and neither Borrower nor any of its Subsidiaries have, withdrawn from participation in, and have not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower or its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

5.9 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely as working capital and to fund its general business requirements in accordance with the provisions of this Agreement, and not for personal, family, household or agricultural purposes. A portion of the proceeds of the Credit Extensions shall be used by Borrower to repay the Existing Indebtedness in full on the Effective Date.

5.10 Full Disclosure. No written representation, warranty or other statement of Borrower or any of its Subsidiaries in any certificate or written statement given to Collateral Agent or any Lender, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Collateral Agent or any Lender, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.11 Definition of "**Knowledge.**" For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower' s knowledge or awareness, to the "best of" Borrower' s knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of the Responsible Officers.

6. AFFIRMATIVE COVENANTS

Borrower shall, and shall cause each of its Subsidiaries to, do all of the following:

6.1 Government Compliance.

(a) Maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of organization and maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Change. Comply with all laws, ordinances and regulations to which Borrower or any of its Subsidiaries is subject, the noncompliance with which could reasonably be expected to have a Material Adverse Change.

(b) Obtain and keep in full force and effect, all of the Governmental Approvals necessary for the performance by Borrower and its Subsidiaries of their respective businesses and obligations under the Loan Documents and the grant of a security interest to Collateral Agent for the ratable benefit of the Lenders, in all of the Collateral. Borrower shall promptly provide copies to Collateral Agent of any material Governmental Approvals obtained by Borrower or any of its Subsidiaries.

6.2 Financial Statements, Reports, Certificates.

(a) Deliver to each Lender:

(i) as soon as available, but no later than thirty (30) days after the last day of each month, a company prepared consolidated and consolidating balance sheet, income statement and cash flow statement covering the consolidated operations of Borrower and its Subsidiaries for such month certified by a Responsible Officer and in a form reasonably acceptable to Collateral Agent;

(ii) as soon as available, but no later than one hundred eighty (180) days after the last day of Borrower' s fiscal year or within five (5) Business Days of filing with the SEC, audited consolidated financial statements prepared under GAAP, consistently applied, together with an unqualified opinion on the financial statements (or qualified only as to going concern provided that Borrower' s investors provide additional equity as needed) from an independent certified public accounting firm acceptable to Collateral Agent in its reasonable discretion;

(iii) as soon as available after approval thereof by Borrower' s Board of Directors, but no later than ten (10) days after the last day of each of Borrower' s fiscal years, Borrower' s annual financial projections for the entire current fiscal year as approved by Borrower' s Board of Directors, which such annual financial projections shall be set forth in a month-by-month format (such annual financial projections as originally

delivered to Collateral Agent and the Lenders are referred to herein as the "**Annual Projections**"; provided that, any revisions of the Annual Projections approved by Borrower' s Board of Directors shall be delivered to Collateral Agent and the Lenders no later than ten (10) days after such approval and, unless Collateral Agent notifies Borrower to the contrary in writing within thirty (30) days after receipt thereof, the term "Annual Projections" shall include such revisions);

(iv) until such time that Borrower becomes subject to the reporting requirements under the Securities Exchange Act of 1934, as amended, within five (5) Business Days of delivery, copies of all statements, reports and notices made available to Borrower' s security holders

(v) within five (5) Business Days of delivery, copies of all statements, reports and notices made available to holders of Subordinated Debt;

(vi) in the event that Borrower becomes subject to the reporting requirements under the Securities Exchange Act of 1934, as amended, within five (5) Business Days of filing, all reports on Form 10-K, 10-Q and 8-K filed with the Securities and Exchange Commission,

(vii) quarterly notice of any amendments of or other changes to the capitalization table of Borrower and prompt notice of any changes of beneficial ownership of the securities of Borrower held by holders of more than 5% of any class of Borrower' s securities, and to the Operating Documents of Borrower or any of its Subsidiaries, together with any copies reflecting such amendments or changes with respect thereto;

(viii) prompt notice of (A) any material change in the composition of the Intellectual Property, (B) the registration of any material copyright, including any subsequent ownership right of Borrower or any of its Subsidiaries in or to any copyright, patent or trademark, including a copy of any such registration, and (C) any event that could reasonably be expected to materially and adversely affect the value of the Intellectual Property;

(ix) as soon as available, but no later than thirty (30) days after the last day of each month, copies of the month-end account statements for each Collateral Account maintained by Borrower or its Subsidiaries, which statements may be provided to Collateral Agent and each Lender by Borrower or directly from the applicable institution(s),

(x) for so long as the Wells Fargo Letter of Credit remains outstanding, within five (5) days of the end of each month, monthly bank statements with respect to the Wells Fargo Letter of Credit Sweep Account; and

(xi) other financial information as reasonably requested by Collateral Agent or any Lender.

Notwithstanding the foregoing, documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents, or provides a link thereto, on Borrower' s website on the internet at Borrower' s website address.

(b) Concurrently with the delivery of the financial statements specified in Section 6.2(a)(i) above but no later than thirty (30) days after the last day of each month, deliver to each Lender, a duly completed Compliance Certificate signed by a Responsible Officer.

(c) Concurrently with the delivery of the financial statements specified in Section 6.2(a)(i) above but no later than thirty (30) days after the last day of each month, deliver to Bank a Borrowing Base Certificate signed by a Responsible Officer in substantially the form of Exhibit D hereto, together with aged listings by invoice date of accounts receivable and accounts payable.

(d) Keep proper books of record and account in accordance with GAAP in all material respects, in which full, true and correct entries shall be made of all dealings and transactions in relation to its business and activities. Borrower shall, and shall cause each of its Subsidiaries to, allow, at the sole cost of Borrower, Collateral Agent or any Lender, during regular business hours upon reasonable prior notice (provided that no notice shall be required when an Event of Default has occurred and is continuing), to visit and inspect any of its properties, to examine and make abstracts or copies from any of its books and records, and to conduct a collateral audit and analysis of its operations and the Collateral. Such audits shall be conducted no more often than twice every year unless (and more frequently if) an Event of Default has occurred and is continuing, in addition to the initial audit of the Collateral.

(e) On the Effective Date, on March 31, 2013, and each March 31 thereafter, Borrower shall deliver to Collateral Agent and each Lender a report outlining the location of all Vantera machines.

6.3 Inventory; Returns. Keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between Borrower, or any of its Subsidiaries, and their respective Account Debtors shall follow Borrower' s, or such Subsidiary' s, customary practices as they exist at the Effective Date. Borrower must promptly notify Collateral Agent and the Lenders of all returns, recoveries, disputes and claims that involve more than Two Hundred Fifty Thousand Dollars ($250,000.00) individually or in the aggregate in any calendar year.

6.4 Taxes; Pensions. Timely file and require each of its Subsidiaries to timely file, all required tax returns and reports and timely pay, and require each of its Subsidiaries to timely file, all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower or its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.8 hereof, and shall deliver to Lenders, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with the terms of such plans.

6.5 Insurance. Keep Borrower' s and its Subsidiaries' business and the Collateral insured for risks and in amounts standard for companies in Borrower' s and its Subsidiaries' industry and location and as Collateral Agent may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are reasonably satisfactory to Collateral Agent and Lenders. All property policies shall have a lender' s loss payable endorsement showing Collateral Agent as lender loss payee and waive subrogation against Collateral Agent, and all liability policies shall show, or have endorsements showing, Collateral Agent, as additional insured. The Collateral Agent shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral, and each provider of any such insurance shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to the Collateral Agent, that it will give the Collateral Agent thirty (30) days prior written notice before any such policy or policies shall be materially altered or canceled. At Collateral Agent' s request, Borrower shall deliver certified copies of policies and evidence of all premium payments. Proceeds payable under any policy shall, at Collateral Agent' s option, be payable to Collateral Agent, for the ratable benefit of the Lenders, on account of the Obligations. Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to Two Hundred Fifty Thousand Dollars ($250,000.00) with respect to any loss, but not exceeding Two Hundred Fifty Thousand Dollars ($250,000.00), in the aggregate for all losses under all casualty policies in any one year, toward the replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Collateral Agent has been granted a first priority security interest, and (b) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Collateral Agent, be payable to Collateral Agent, for the ratable benefit of the Lenders, on account of the Obligations. If Borrower or any of its Subsidiaries fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons, Collateral Agent and/or any Lender may make, at Borrower' s expense, all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Collateral Agent or such Lender deems prudent.

6.6 Operating Accounts.

(a) Maintain all of Borrower' s and its Subsidiaries' depository and operating accounts with Bank and its primary investment accounts with Bank or its Affiliates; in each case, in accounts which are subject to a Control Agreement in favor of Collateral Agent; provided that Borrower may maintain investment accounts with a Person other than Bank or Bank' s Affiliates, subject to the terms of this Section 6.6, so long as (i) no Event of

Default has occurred and is continuing; (ii) at all times the aggregate amount of Borrower' s cash held at Bank and Bank' s Affiliates exceeds the lesser of (x) Twenty Million Dollars ($20,000,000) or (y) one hundred twenty percent (120%) of the outstanding amount of the Term Loans from time to time; and (iii) any such investment account is subject to a Control Agreement in favor of, and in form and substance satisfactory to, Collateral Agent.

(b) Borrower shall provide Collateral Agent five (5) days' prior written notice before Borrower or any of its Subsidiaries establishes any Collateral Account at or with any Person other than Bank or its Affiliates. In addition, for each Collateral Account that Borrower or any of its Subsidiaries, at any time maintains, Borrower or such Subsidiary shall cause the applicable bank or financial institution at or with which such Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Collateral Agent' s Lien in such Collateral Account in accordance with the terms hereunder prior to the establishment of such Collateral Account, which Control Agreement may not be terminated without prior written consent of Collateral Agent. The provisions of the previous sentence shall not apply to (i) deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower' s, or any of its Subsidiaries' , employees and identified to Collateral Agent by Borrower as such in the Perfection Certificates and (ii) for so long as the Wells Fargo Letter of Credit remains outstanding, the Wells Fargo Letter of Credit Account and the Wells Fargo Letter of Credit Sweep Account.

(c) Neither Borrower nor any of its Subsidiaries shall maintain any Collateral Accounts except Collateral Accounts maintained in accordance with Sections 6.6(a) and (b).

(d) Except as otherwise set forth below, Borrower shall at all times cause any funds received by Borrower on account of Borrower' s Accounts receivable from any source immediately to be deposited into a cash collateral account at Bank in Borrower' s name (the "**Cash Collateral Account**"), over which Bank shall have exclusive and unrestricted access; provided the same shall be subject to a control agreement in favor of Collateral Agent. Borrower shall direct its customers to mail or deliver all checks or other forms of payment for amounts owing to Borrower to a post office box designated by Bank (the "**Lockbox**"), over which Bank shall have exclusive and unrestricted access. As of the Closing Date, Borrower shall open the Lockbox, and thereafter Borrower shall at all times maintain the Lockbox with Bank in accordance with the terms hereof. Except for funds deposited into the Cash Collateral Account, all funds received by Borrower from any source shall immediately be directed to the Lockbox. Bank shall collect the mail delivered to such post office box, open such mail, and endorse and credit all items to the Lockbox. All funds flowing through the Lockbox shall then automatically be transferred to the Cash Collateral Account. Borrower shall direct all customers or other persons owing money to Borrower on account of Borrower' s Accounts receivable who make payments by electronic transfer of funds to wire such funds directly to the Cash Collateral Account. Borrower shall hold in trust for Bank all amounts that Borrower receives despite the directions to make payments to the Cash Collateral Account, and immediately deliver such payments to Bank in their original form as received from the customer, with proper endorsements for deposit into the Cash Collateral Account. Borrower irrevocably authorizes Bank to transfer to the Cash Collateral Account any funds that have been deposited into any other accounts or that Bank has received by wire transfer, check, cash, or otherwise. Bank shall have all right, title and interest in all of the items from time to time held in the Cash Collateral Account and their proceeds. Neither Borrower nor any person claiming through Borrower shall have any right or control over the use of, or any right to withdraw any amount from, the Cash Collateral Account, which shall be under the sole control of Bank. Bank may apply amounts held in the Cash Collateral Account to the outstanding balance of the Obligations on a daily basis. Bank may from time to time in its discretion make Advances to Borrower to cover checks or other items or charges that Borrower has drawn or made against the Designated Deposit Account or to cause payment of amounts due under the Loan Documents. Borrower authorizes Bank to make such Advances from time to time by means of appropriate entries of credits to the Designated Deposit Account sufficient to cover any such charges then presented, such Advances to be subject to the terms of this Agreement as though made pursuant to a Payment/ Advance Form delivered by Borrower.

6.7 Protection of Intellectual Property Rights. Borrower and each of its Subsidiaries shall: (a) use commercially reasonable efforts to protect, defend and maintain the validity and enforceability of its Intellectual Property that is material to Borrower' s business; (b) promptly advise Collateral Agent in writing of material infringement by a third party of its Intellectual Property; and (c) not allow any Intellectual Property material to Borrower' s business to be abandoned, forfeited or dedicated to the public without Collateral Agent' s prior written consent.

6.8 Litigation Cooperation. Commencing on the Effective Date and continuing through the termination of this Agreement, make reasonably available to Collateral Agent and the Lenders, without expense to Collateral Agent or the Lenders, Borrower and each of Borrower' s officers, employees and agents and Borrower' s Books, to the extent that Collateral Agent or any Lender may reasonably deem them necessary to prosecute or defend any third-party suit or proceeding instituted by or against Collateral Agent or any Lender with respect to any Collateral or relating to Borrower.

6.9 Notices of Litigation and Default. Borrower will give prompt written notice to Collateral Agent and the Lenders of any litigation or governmental proceedings pending or threatened (in writing) against Borrower or any of its Subsidiaries, which could reasonably be expected to result in damages or costs to Borrower or any of its Subsidiaries of Two Hundred Fifty Thousand Dollars ($250,000.00) or more or which could reasonably be expected to have a Material Adverse Change. Without limiting or contradicting any other more specific provision of this Agreement, promptly (and in any event within three (3) Business Days) upon Borrower becoming aware of the existence of any Event of Default or event which, with the giving of notice or passage of time, or both, would constitute an Event of Default, Borrower shall give written notice to Collateral Agent and the Lenders of such occurrence, which such notice shall include a reasonably detailed description of such Event of Default or event which, with the giving of notice or passage of time, or both, would constitute an Event of Default.

6.10 Financial Covenants. Borrower shall at all times maintain the following financial ratios and covenants, to be tested as of the last day of the applicable month, on a consolidated basis with respect to Borrower and its Subsidiaries:

(i) **Quick Ratio**. A Quick Ratio of least (x) 1.25 to 1.00, from the Closing Date through February 28, 2013; (y) 1.10 to 1.00 from March 1, 2013 through June 30, 2013; and (z) 1.00 to 1.00 from and after July 1, 2013.

(ii) **Performance to Plan**; **Revenue**. Revenues shall be at least eighty percent (80.00%) of the trailing three (3) month projections that have been approved by Borrower' s Board of Directors and attached to the Schedule hereto; and shall be equal to or greater than the Revenues for the same period from the previous year. Borrower shall deliver to Bank updated Projections approved by Borrower' s Board of Directors for each fiscal year in accordance with Section 6.2 hereof; and this covenant shall be measured against such updated Projections, provided that all such Projections shall include annual projected Revenues of at least Fifty Five Million Dollars ($55,000,000.00).

6.11 Landlord Waivers; Bailee Waivers. In the event that Borrower or any of its Subsidiaries, after the Effective Date, intends to add any new offices or business locations, including warehouses, or otherwise store any portion of the Collateral with, or deliver any portion of the Collateral to, a bailee, in each case pursuant to Section 7.2, then, other than with respect to a Placement Location, Borrower or such Subsidiary will first receive the written consent of Collateral Agent and, in the event that the Collateral at any new location is valued in excess of Two Hundred Fifty Thousand Dollars ($250,000.00) in the aggregate, such bailee or landlord, as applicable, if requested by Collateral Agent, must execute and deliver a bailee waiver or landlord waiver, as applicable, in form and substance reasonably satisfactory to Collateral Agent prior to the addition of any new offices or business locations, or any such storage with or delivery to any such bailee, as the case may be.

6.12 Creation/Acquisition of Subsidiaries. In the event Borrower, or any of its Subsidiaries creates or acquires any Subsidiary, Borrower shall provide prior written notice to Collateral Agent and each Lender of the creation or acquisition of such new Subsidiary and take all such action as may be reasonably required by Collateral Agent or any Lender to cause each such Subsidiary to become a co-Borrower hereunder or to guarantee the Obligations of Borrower under the Loan Documents and, in each case, grant a continuing pledge and security interest in and to the assets of such Subsidiary (substantially as described on Exhibit A hereto); and Borrower (or its Subsidiary, as applicable) shall grant and pledge to Collateral Agent, for the ratable benefit of the Lenders, a perfected security interest in the stock, units or other evidence of ownership of each such newly created Subsidiary.

6.13 Further Assurances.

(a) Execute any further instruments and take further action as Collateral Agent or any Lender reasonably requests to perfect or continue Collateral Agent' s Lien in the Collateral or to effect the purposes of this Agreement.

(b) Deliver to Collateral Agent and Lenders, within five (5) days after the same are sent or received, copies of all material correspondence, reports, documents and other filings with any Governmental Authority that could reasonably be expected to have a material adverse effect on any of the Governmental Approvals material to Borrower' s business or otherwise could reasonably be expected to have a Material Adverse Change.

7. NEGATIVE COVENANTS

Borrower shall not, and shall not permit any of its Subsidiaries to, do any of the following without the prior written consent of the Required Lenders:

7.1 Dispositions. Convey, sell, lease, transfer, assign, dispose of or otherwise make cash payments consisting of (collectively, "**Transfer**"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) consisting of cash payments to trade creditors in the ordinary course of business; (b) of Inventory in the ordinary course of business (including without limitation, the use and placement of the Vantera machines consistent with Borrower' s practices as of the Effective Date); (c) of worn-out or obsolete Equipment; (d) in connection with Permitted Liens, Permitted Investments and Permitted Licenses; and (e) Transfers in addition to those specifically enumerated above, to the extent the same are specifically reflected in the Annual Projections.

7.2 Changes in Business, Management, Ownership, or Business Locations. (a) Engage in or permit any of its Subsidiaries to engage in any business other than the businesses engaged in by Borrower as of the Effective Date or reasonably related thereto; (b) liquidate or dissolve; (c) (i) any Key Person shall cease to be actively engaged in the management of Borrower unless a replacement for such Key Person is approved by Borrower' s Board of Directors and engaged by Borrower within ninety (90) days of such change, or (ii) enter into any transaction or series of related transactions in which the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than forty nine percent (49%) of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions (other than by the sale of Borrower' s equity securities in a public offering, a private placement of public equity or to venture capital investors so long as Borrower identifies to Collateral Agent the venture capital investors prior to the closing of the transaction); provided that with respect to this (c)(ii), Borrower may enter into such transaction or series of related transactions, provided that (1) contemporaneously with the closing of any such transaction or series of related transactions, all Obligations are indefeasibly paid in full in cash and Lenders' obligations to make Credit Extensions hereunder have terminated, and (2) Borrower obtains Collateral Agent' s prior written consent, which such consent as required by (2) shall not be required if (x) no Event of Default exists when such transaction or series of transactions is entered into by Borrower, (y) such transaction or series of transactions does not give any Person the right to claim any fees, payments or damages from Borrower, and (z) Borrower notifies Collateral Agent in advance of entering into such a transaction or series of transactions; or (d) suffer a change on its board of directors, which results in the failure of at least one managing director or partner of Three Arch Partners or Sightline Partners, or their respective Affiliates) to serve as a voting member (provided however, Lenders may not unreasonably withhold the prior written consent set forth below in the event that Borrower becomes subject to the reporting requirements under the Securities Exchange Act of 1934, as amended, in connection with a Qualified Public Offering, and such change on its board of directors occurs not less than one (1) year from the closing of such Qualified Public Offering), or suffer the resignation of one or more directors from its board of directors in anticipation of Borrower' s insolvency, in either case without the prior written consent of the Lenders which may be withheld in the Lenders' sole discretion. Borrower shall not, without at least thirty (30) days' prior written notice to Collateral Agent: (A) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Two Hundred Fifty Thousand Dollars ($250,000.00) in assets or property of Borrower or any of its Subsidiaries); (B) change its jurisdiction of organization, (C) change its organizational structure or type, (D) change its legal name, or (E) change any organizational number (if any) assigned by its jurisdiction of organization.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock, shares or property of another Person, unless contemporaneously with the closing of any such merger, consolidation or acquisition, all Obligations are indefeasibly paid in full in cash and Lenders' obligations to make Credit Extensions hereunder have terminated. A Subsidiary may merge or consolidate into another Subsidiary (provided such surviving Subsidiary is a "co-Borrower" hereunder or has provided a secured Guaranty of Borrower' s Obligations hereunder) or with (or into) Borrower provided Borrower is the surviving legal entity, and as long as no Event of Default is occurring prior thereto or arises as a result therefrom. Without limiting the foregoing, Borrower shall not, without Collateral Agent' s prior written consent, enter into any binding contractual arrangement with any Person to attempt to facilitate a merger or acquisition of Borrower, unless (i) no Event of Default exists when such agreement is entered into by Borrower, (ii) such agreement does not give such Person the right to claim any fees, payments or damages from Borrower, and (iii) Borrower notifies Collateral Agent in advance of entering into such an agreement.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, or permit any Collateral not to be subject to the first priority security interest granted herein (except for Permitted Liens that are permitted by the terms of this Agreement to have priority over Collateral Agent' s Lien), or enter into any agreement, document, instrument or other arrangement (except with or in favor of Collateral Agent, for the ratable benefit of the Lenders) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower, or any of its Subsidiaries, from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower' s or such Subsidiary' s Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and the definition of "**Permitted Liens**" herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.6 hereof.

7.7 Distributions; Investments. (a) Pay any dividends (other than dividends payable solely in capital stock) or make any distribution or payment in respect of or redeem, retire or purchase any capital stock (other than repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements, stockholder rights plans, director or consultant stock option plans, or similar plans, provided such repurchases do not exceed Two Hundred Fifty Thousand Dollars ($250,000.00) in the aggregate per fiscal year) or (b) directly or indirectly make any Investment other than Permitted Investments, or permit any of its Subsidiaries to do so. Notwithstanding the forgoing, (x) upon the closing of a Qualified Public Offering, Borrower may make cash payments to the holders of its Series F Preferred Stock constituting the Series F Dividend, as used in, defined under, and pursuant to the terms of Borrower' s Charter as in effect on the Effective Date, provided that (i) no Event of Default has occurred and is continuing immediately prior to, or would exist as a result of, the making of such payments; (ii) the aggregate amount of such payments does not exceed Five Million Two Hundred Thousand Dollars ($5,200,000) and (iii) Borrower has not amended, from and after the Effective Date through the date of payment of the Series F Dividend, its Charter to change the terms of the Series F Dividend or the terms of the dividend or redemption rights, or any similar or related rights, of the holders of Borrower' s preferred stock; and (y) Borrower may make cash payments to federal and state taxing authorities required to be paid in connection with the exercise of stock options held by the Borrower' s Chief Executive Office and Chief Financial Officer, provided that (i) no Event of Default has occurred and is continuing immediately prior to, or would exist as a result of, the making of such payments; and (ii) the aggregate amount of such payments does not exceed One Million One Hundred Thousand Dollars ($1,100,000) in the aggregate (the "**Permitted Employee Tax Payments**").

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower or any of its Subsidiaries, except for (a) transactions that are in the ordinary course of Borrower' s or such Subsidiary' s business, upon fair and reasonable terms that are no less favorable to Borrower or such Subsidiary than would be obtained in an arm' s length transaction with a non-affiliated Person, (b) Subordinated Debt or equity investments by Borrower' s investors in Borrower or its Subsidiaries, and (c) the Permitted Employee Tax Payments.

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof or adversely affect the subordination thereof to Obligations owed to the Lenders.

7.10 Compliance. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a Material Adverse Change, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower or any of its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

7.11 Compliance with Anti-Terrorism Laws. Collateral Agent hereby notifies Borrower and each of its Subsidiaries that pursuant to the requirements of Anti-Terrorism Laws, and Collateral Agent' s policies and practices, Collateral Agent is required to obtain, verify and record certain information and documentation that identifies Borrower and each of its Subsidiaries and their principals, which information includes the name and address of Borrower and each of its Subsidiaries and their principals and such other information that will allow Collateral Agent to identify such party in accordance with Anti-Terrorism Laws. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries permit any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Borrower and each of its Subsidiaries shall immediately notify Collateral Agent if Borrower or such Subsidiary has knowledge that Borrower, or any Subsidiary or Affiliate of Borrower, is listed on the OFAC Lists or (a) is convicted on, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries, permit any Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "**Event of Default**") under this Agreement:

8.1 Payment Default. Borrower fails to (a) make any payment of principal or interest on any Credit Extension on its due date, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day grace period shall not apply to payments due on the Maturity Date or the date of acceleration pursuant to Section 9.1 (a) hereof). During the cure period, the failure to cure the payment default is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default.

(a) Borrower or any of its Subsidiaries fails or neglects to perform any obligation in Section 6 or Borrower violates any covenant in Section 7; or

(b) Borrower, or any of its Subsidiaries, fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within fifteen (15) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the fifteen (15) day period or cannot after diligent attempts by Borrower be cured within such fifteen (15) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Grace periods provided under this Section shall not apply, among other things, to financial covenants or any other covenants set forth in subsection (a) above;

8.3 Material Adverse Change. A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or any of its Subsidiaries or of any entity under control of Borrower or its Subsidiaries on deposit with any Lender or any Lender' s Affiliate or any bank or other institution at which Borrower or any of its Subsidiaries maintains a Collateral Account, or (ii) a notice of lien, levy, or assessment is filed against Borrower or any of its Subsidiaries or their respective assets by any government agency, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; and

(b) (i) any material portion of Borrower' s or any of its Subsidiaries' assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower or any of its Subsidiaries from conducting any part of its business;

8.5 Insolvency. (a) Borrower or any of its Subsidiaries is or becomes Insolvent; (b) Borrower or any of its Subsidiaries begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower or any of its Subsidiaries and not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made while Borrower or any Subsidiary is Insolvent and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements. There is a default in any agreement to which Borrower or any of its Subsidiaries is a party with a third party or parties resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Two Hundred Fifty Thousand Dollars ($250,000.00) or that could reasonably be expected to have a Material Adverse Change;

8.7 Judgments. One or more judgments, orders, or decrees for the payment of money in an amount, individually or in the aggregate, of at least Two Hundred Fifty Thousand Dollars ($250,000.00) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower or any of its Subsidiaries and shall remain unsatisfied, unvacated, or unstayed for a period of ten (10) days after the entry thereof (provided that no Credit Extensions will be made prior to the satisfaction, vacation, or stay of such judgment, order or decree);

8.8 Misrepresentations. Borrower or any of its Subsidiaries or any Person acting for Borrower or any of its Subsidiaries makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Collateral Agent and/or Lenders or to induce Collateral Agent and/or the Lenders to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.9 Subordinated Debt. A default or breach occurs under any agreement between Borrower or any of its Subsidiaries and any creditor of Borrower or any of its Subsidiaries that signed a subordination, intercreditor, or other similar agreement with Collateral Agent or the Lenders, or any creditor that has signed such an agreement with Collateral Agent or the Lenders breaches any terms of such agreement;

8.10 Guaranty. (a) Any Guaranty terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any Guaranty; (c) any circumstance described in Sections 8.3, 8.4, 8.5, 8.7, or 8.8 occurs with respect to any Guarantor, or (d) the liquidation, winding up, or termination of existence of any Guarantor;

8.11 Governmental Approvals. Any Governmental Approval shall have been revoked, rescinded, suspended, modified in an adverse manner, or not renewed in the ordinary course for a full term *and* such revocation, rescission, suspension, modification or non-renewal has resulted in or could reasonably be expected to result in a Material Adverse Change; or

8.12 Lien Priority. Any Lien created hereunder or by any other Loan Document shall at any time fail to constitute a valid and perfected Lien on any of the Collateral purported to be secured thereby, subject to no prior or equal Lien, other than Permitted Liens which are permitted to have priority in accordance with the terms of this Agreement.

9. RIGHTS AND REMEDIES

9.1 Rights and Remedies.

(a) Upon the occurrence and during the continuance of an Event of Default, Collateral Agent may, and at the written direction of Required Lenders shall, without notice or demand, do any or all of the following: (i) deliver notice of the Event of Default to Borrower, (ii) by notice to Borrower declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations shall be immediately due and payable without any action by Collateral Agent or the Lenders) or (iii) by notice to Borrower suspend or terminate the obligations, if any, of the Lenders to advance money or extend credit for Borrower' s benefit under this Agreement or under any other agreement between Borrower and Collateral Agent and/or the Lenders (but if an Event of Default described in Section 8.5 occurs all obligations, if any, of the Lenders to advance money or extend credit for Borrower' s benefit under this Agreement or under any other agreement between Borrower and Collateral Agent and/or the Lenders shall be immediately terminated without any action by Collateral Agent or the Lenders).

(b) Without limiting the rights of Collateral Agent and the Lenders set forth in Section 9.1(a) above, upon the occurrence and during the continuance of an Event of Default, Collateral Agent shall have the right**,** without notice or demand, to do any or all of the following:

(i) foreclose upon and/or sell or otherwise liquidate, the Collateral;

(ii) apply to the Obligations any (a) balances and deposits of Borrower that Collateral Agent or any Lender holds or controls, or (b) any amount held or controlled by Collateral Agent or any Lender owing to or for the credit or the account of Borrower; and/or

(iii) commence and prosecute an Insolvency Proceeding or consent to Borrower commencing any Insolvency Proceeding.

(c) Without limiting the rights of Collateral Agent and the Lenders set forth in Sections 9.1(a) and (b) above, upon the occurrence and during the continuance of an Event of Default, Collateral Agent shall have the right, without notice or demand, to do any or all of the following:

(i) settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Collateral Agent considers advisable, notify any Person owing Borrower money of Collateral Agent' s security interest in such funds, and verify the amount of such account;

(ii) make any payments and do any acts it considers reasonably necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Collateral Agent requests and make it available in a location as Collateral Agent reasonably designates.

Collateral Agent may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Collateral Agent a license to enter and occupy any of its premises, without charge, to exercise any of Collateral Agent' s rights or remedies;

(iii) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, and/or advertise for sale, the Collateral. Collateral Agent is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower' s and each of its Subsidiaries' labels, patents, copyrights, mask works, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, solely for the purpose of and in connection with Collateral Agent' s exercise of its rights under this Section 9.1, Borrower' s and each of its Subsidiaries' rights under all licenses and all franchise agreements inure to Collateral Agent, for the benefit of the Lenders;

(iv) place a "hold" on any account maintained with Collateral Agent or the Lenders and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(v) demand and receive possession of Borrower' s Books;

(vi) appoint a receiver to seize, manage and realize any of the Collateral, and such receiver shall have any right and authority as any competent court will grant or authorize in accordance with any applicable law, including any power or authority to manage the business of Borrower or any of its Subsidiaries;

(vii) subject to clauses 9.1(a) and (b), exercise all rights and remedies available to Collateral Agent and each Lender under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof); and

(viii) demand that Borrower (i) deposit cash with Bank in an amount equal to the amount of any Letters of Credit remaining undrawn, as collateral security for the repayment of any future drawings under such Letters of Credit, and (ii) pay in advance all Letter of Credit fees scheduled to be paid or payable over the remaining term of the Letters of Credit, and Borrower shall promptly deposit and pay such amounts.

Notwithstanding any provision of this Section 9.1 to the contrary, upon the occurrence of any Event of Default, Collateral Agent shall have the right to exercise any and all remedies referenced in this Section 9.1 without the written consent of Required Lenders following the occurrence of an Exigent Circumstance. As used in the immediately preceding sentence, "**Exigent Circumstance**" means any event or circumstance that, in the reasonable judgment of Collateral Agent, imminently threatens the ability of Collateral Agent to realize upon all or any material portion of the Collateral, such as, without limitation, fraudulent removal, concealment, or abscondment thereof, destruction or material waste thereof, or failure of Borrower or any of its Subsidiaries after reasonable demand to maintain or reinstate adequate casualty insurance coverage, or which, in the judgment of Collateral Agent, could reasonably be expected to result in a material diminution in value of the Collateral.

9.2 Power of Attorney. Borrower hereby irrevocably appoints Collateral Agent as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower' s or any of its Subsidiaries' name on any checks or other forms of payment or security; (b) sign Borrower' s or any of its Subsidiaries' name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Collateral Agent determines reasonable; (d) make, settle, and adjust all claims under Borrower' s insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Collateral Agent or a third party as the Code or any applicable law permits. Borrower hereby appoints Collateral Agent as its lawful attorney-in-fact to sign Borrower' s or any of its Subsidiaries' name on any documents necessary to perfect or continue the perfection of Collateral Agent' s security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations (other than inchoate indemnity obligations) have been satisfied in full and Collateral Agent and the

Lenders are under no further obligation to make Credit Extensions hereunder. Collateral Agent' s foregoing appointment as Borrower' s or any of its Subsidiaries' attorney in fact, and all of Collateral Agent' s rights and powers, coupled with an interest, are irrevocable until all Obligations (other than inchoate indemnity obligations) have been fully repaid and performed and Collateral Agent' s and the Lenders' obligation to provide Credit Extensions terminates. Without limiting the foregoing, effective only upon the occurrence and during the continuance of an Event of Default, Borrower hereby irrevocably appoints Bank (and any of Bank' s designated officers, or employees) as Borrower' s true and lawful attorney to: (a) send requests for verification of Accounts or notify account debtors of Bank' s security interest in the Accounts; (b) endorse Borrower' s name on any checks or other forms of payment or security that may come into Bank' s possession; (c) sign Borrower' s name on any invoice or bill of lading relating to any Account, drafts against account debtors, schedules and assignments of Accounts, verifications of Accounts, and notices to account debtors; and (d) settle and adjust disputes and claims respecting the accounts directly with account debtors, for amounts and upon terms which Bank determines to be reasonable. The appointment of Bank as Borrower' s attorney in fact, and each and every one of Bank' s rights and powers, as set forth herein, being coupled with an interest, is irrevocable until all of the Obligations have been fully repaid and performed and Bank' s obligation to provide advances hereunder is terminated.

9.3 Protective Payments. If Borrower or any of its Subsidiaries fail to obtain the insurance called for by Section 6.5 or fails to pay any premium thereon or fails to pay any other amount which Borrower or any of its Subsidiaries is obligated to pay under this Agreement or any other Loan Document, Collateral Agent may obtain such insurance or make such payment, and all amounts so paid by Collateral Agent are Lenders' Expenses and immediately due and payable, bearing interest at the Default Rate, and secured by the Collateral. Collateral Agent will make reasonable efforts to provide Borrower with notice of Collateral Agent obtaining such insurance or making such payment at the time it is obtained or paid or within a reasonable time thereafter. No such payments by Collateral Agent are deemed an agreement to make similar payments in the future or Collateral Agent' s waiver of any Event of Default.

9.4 Application of Payments and Proceeds. Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence and during the continuance of an Event of Default, (a) Borrower irrevocably waives the right to direct the application of any and all payments at any time or times thereafter received by Collateral Agent from or on behalf of Borrower or any of its Subsidiaries of all or any part of the Obligations, and, as between Borrower on the one hand and Collateral Agent and Lenders on the other, Collateral Agent shall have the continuing and exclusive right to apply and to reapply any and all payments received against the Obligations in such manner as Collateral Agent may deem advisable notwithstanding any previous application by Collateral Agent, and (b) the proceeds of any sale of, or other realization upon all or any part of the Collateral shall be applied: first, to the Lenders' Expenses; second, to accrued and unpaid interest on the Obligations (including any interest which, but for the provisions of the United States Bankruptcy Code, would have accrued on such amounts); third, to the principal amount of the Obligations outstanding; and fourth, to any other indebtedness or obligations of Borrower owing to Collateral Agent or any Lender under the Loan Documents. Any balance remaining shall be delivered to Borrower or to whoever may be lawfully entitled to receive such balance or as a court of competent jurisdiction may direct. In carrying out the foregoing, (x) amounts received shall be applied in the numerical order provided until exhausted prior to the application to the next succeeding category, and (y) each of the Persons entitled to receive a payment in any particular category shall receive an amount equal to its pro rata share of amounts available to be applied pursuant thereto for such category. Any reference in this Agreement to an allocation between or sharing by the Lenders of any right, interest or obligation "ratably," "proportionally" or in similar terms shall refer to Pro Rata Share unless expressly provided otherwise. Collateral Agent, or if applicable, each Lender, shall promptly remit to the other Lenders such sums as may be necessary to ensure the ratable repayment of each Lender' s portion of any Term Loan and the ratable distribution of interest, fees and reimbursements paid or made by Borrower. Notwithstanding the foregoing, a Lender receiving a scheduled payment shall not be responsible for determining whether the other Lenders also received their scheduled payment on such date; provided, however, if it is later determined that a Lender received more than its ratable share of scheduled payments made on any date or dates, then such Lender shall remit to Collateral Agent or other Lenders such sums as may be necessary to ensure the ratable payment of such scheduled payments, as instructed by Collateral Agent. If any payment or distribution of any kind or character, whether in cash, properties or securities, shall be received by a Lender in excess of its ratable share, then the portion of such payment or distribution in excess of such Lender' s ratable share shall be received by such Lender in trust for and shall be promptly paid over to the other Lender for application to the payments of amounts due on the other Lenders' claims. To the extent any payment for the account of Borrower is required to be returned

as a voidable transfer or otherwise, the Lenders shall contribute to one another as is necessary to ensure that such return of payment is on a pro rata basis. If any Lender shall obtain possession of any Collateral, it shall hold such Collateral for itself and as agent and bailee for Collateral Agent and other Lenders for purposes of perfecting Collateral Agent' s security interest therein.

9.5 Liability for Collateral. So long as Collateral Agent and the Lenders comply with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Collateral Agent and the Lenders, Collateral Agent and the Lenders shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Failure by Collateral Agent or any Lender, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Collateral Agent or any Lender thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by Collateral Agent and the Required Lenders and then is only effective for the specific instance and purpose for which it is given. The rights and remedies of Collateral Agent and the Lenders under this Agreement and the other Loan Documents are cumulative. Collateral Agent and the Lenders have all rights and remedies provided under the Code, any applicable law, by law, or in equity. The exercise by Collateral Agent or any Lender of one right or remedy is not an election, and Collateral Agent' s or any Lender' s waiver of any Event of Default is not a continuing waiver. Collateral Agent' s or any Lender' s delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Borrower waives, to the fullest extent permitted by law, demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Collateral Agent or any Lender on which Borrower or any Subsidiary is liable.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication (collectively, "**Communication**") by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Any of Collateral Agent, Lender or Borrower may change its mailing address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower: LIPOSCIENCE, INC.
2500 Sumner Boulevard
Raleigh, NC 27616
Attn: Chief Financial Officer
Fax: (919) 872-5927
Email: lmartindale@liposcience.com

with a copy (which shall not constitute notice) to:

General Counsel (at the same address as the Borrower above)

If to Collateral Agent:	OXFORD FINANCE LLC 133 North Fairfax Street Alexandria, Virginia 22314 Attention: Legal Department Fax: (703) 519-5225 Email: LegalDepartment@oxfordfinance.com
If to Square 1:	SQUARE 1 BANK 406 Blackwell Street, Suite 240 Durham, North Carolina 27701 Attn: Loan Operations Manager and Mara Huntington FAX: (919) 314-3080
with a copy (which shall not constitute notice) to:	DLA Piper LLP (US) 4365 Executive Drive, Suite 1100 San Diego, California 92121-2133 Attn: Troy Zander Fax: (858) 638-5086 troy.zander@dlapiper.com

11. CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER, AND JUDICIAL REFERENCE

California law governs the Loan Documents without regard to principles of conflicts of law. Borrower, Collateral Agent and each Lender each submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Collateral Agent or any Lender from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Collateral Agent or any Lender. Borrower expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in, or subsequently provided by Borrower in accordance with, Section 10 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower' s actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER, COLLATERAL AGENT AND EACH LENDER EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR EACH PARTY TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure §§ 638 through 645.1, inclusive. The private

judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and orders applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to California Code of Civil Procedure § 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

12. GENERAL PROVISIONS

12.1 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not transfer, pledge or assign this Agreement or any rights or obligations under it without Collateral Agent' s and each Lender' s prior written consent (which may be granted or withheld in Collateral Agent' s and each Lender' s discretion, subject to Section 12.6). The Lenders have the right, without the consent of or notice to Borrower, to sell, transfer, assign, pledge, negotiate, or grant participation in **(any** such sale, transfer, assignment, negotiation**,** or grant of a participation, a "**Lender Transfer**"**)** all or any part of, or any interest in, the Lenders' obligations, rights, and benefits under this Agreement and the other Loan Documents; *provided*, *however*, that any such Lender Transfer (other than a transfer, pledge, sale or assignment to an Eligible Assignee) of its obligations, rights, and benefits under this Agreement and the other Loan Documents shall require the prior written consent of the Required Lenders (such approved assignee, an "**Approved Lender**"**).** Borrower and Collateral Agent shall be entitled to continue to deal solely and directly with such Lender in connection with the interests so assigned until Collateral Agent shall have received and accepted an effective assignment agreement in form satisfactory to Collateral Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee or Approved Lender as Collateral Agent reasonably shall require. Notwithstanding anything to the contrary contained herein, so long as no Event of Default has occurred and is continuing, no Lender Transfer (other than a Lender Transfer (i) in respect of the Warrants or (ii) in connection with (x) assignments by a Lender due to a forced divestiture at the request of any regulatory agency; or (y) upon the occurrence of a default, event of default or similar occurrence with respect to a Lender' s own financing or securitization transactions) shall be permitted, without Borrower' s consent, to any Person which is an Affiliate or Subsidiary of Borrower, a direct competitor of Borrower or a vulture hedge fund, each as determined by Collateral Agent.

12.2 Indemnification. Borrower agrees to indemnify, defend and hold Collateral Agent and the Lenders and their respective directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Collateral Agent or the Lenders (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") asserted by any other party in connection with; related to; following; or arising from, out of or under, the transactions contemplated by the Loan Documents; and (b) all losses or Lenders' Expenses incurred, or paid by Indemnified Person in connection with; related to; following; or arising from, out of or under, the transactions contemplated by the Loan Documents between Collateral Agent, and/or the Lenders and Borrower (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person' s gross negligence or willful misconduct. Borrower hereby further indemnifies, defends and holds each Indemnified Person harmless from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements of any kind or nature whatsoever (including the fees and disbursements of counsel for such Indemnified Person) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnified Person shall be designated a party thereto and including any such proceeding initiated by or on behalf of Borrower, and the reasonable expenses of investigation by engineers, environmental consultants and similar technical personnel and any commission, fee or compensation claimed by any broker (other than any broker retained by

Collateral Agent or Lenders) asserting any right to payment for the transactions contemplated hereby which may be imposed on, incurred by or asserted against such Indemnified Person to the extent any of the foregoing are a result of or in connection with the transactions contemplated hereby and the use or intended use of Advances or other Credit Extensions except for liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements directly caused by such Indemnified Person' s gross negligence or willful misconduct.

12.3 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

12.4 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.5 Correction of Loan Documents. Collateral Agent and the Lenders may correct patent errors and fill in any blanks in this Agreement and the other Loan Documents consistent with the agreement of the parties.

12.6 Amendments in Writing; Integration. (a) No amendment, modification, termination or waiver of any provision of this Agreement or any other Loan Document, no approval or consent thereunder, or any consent to any departure by Borrower or any of its Subsidiaries therefrom, shall in any event be effective unless the same shall be in writing and signed by Borrower, Collateral Agent and the Required Lenders provided that:

(i) no such amendment, waiver or other modification that would have the effect of increasing or reducing a Lender' s Term Loan Commitment or Commitment Percentage shall be effective as to such Lender without such Lender' s written consent;

(ii) no such amendment, waiver or modification that would affect the rights and duties of Collateral Agent shall be effective without Collateral Agent' s written consent or signature;

(iii) no such amendment, waiver or other modification shall, unless signed by all the Lenders directly affected thereby, (A) reduce the principal of, rate of interest on or any fees with respect to any Term Loan or forgive any principal, interest (other than default interest) or fees (other than late charges) with respect to any Term Loan (B) postpone the date fixed for, or waive, any payment of principal of any Term Loan or of interest on any Term Loan (other than default interest) or any fees provided for hereunder (other than late charges or for any termination of any commitment); (C) change the definition of the term "**Required Lenders**" or the percentage of Lenders which shall be required for the Lenders to take any action hereunder; (D) release all or substantially all of any material portion of the Collateral, authorize Borrower to sell or otherwise dispose of all or substantially all or any material portion of the Collateral or release any Guarantor of all or any portion of the Obligations or its guaranty obligations with respect thereto, except, in each case with respect to this clause (D), as otherwise may be expressly permitted under this Agreement or the other Loan Documents (including in connection with any disposition permitted hereunder); (E) amend, waive or otherwise modify this Section 12.6 or the definitions of the terms used in this Section 12.6 insofar as the definitions affect the substance of this Section 12.6; (F) consent to the assignment, delegation or other transfer by Borrower of any of its rights and obligations under any Loan Document or release Borrower of its payment obligations under any Loan Document, except, in each case with respect to this clause (F), pursuant to a merger or consolidation permitted pursuant to this Agreement; (G) amend any of the provisions of Section 9.4 or amend any of the definitions of Pro Rata Share, Term Loan Commitment, Commitment Percentage or that provide for the Lenders to receive their Pro Rata Shares of any fees, payments, setoffs or proceeds of Collateral hereunder; (H) subordinate the Liens granted in favor of Collateral Agent securing the Obligations; or (I) amend any of the provisions of Section 12.10. It is hereby understood and agreed that all Lenders shall be deemed directly affected by an amendment, waiver or other modification of the type described in the preceding clauses (C), (D), (E), (F), (G) and (H) of the preceding sentence;

(iv) the provisions of the foregoing clauses (i), (ii) and (iii) are subject to the provisions of any interlender or agency agreement among the Lenders and Collateral Agent pursuant to which any Lender may agree to give its consent in connection with any amendment, waiver or modification of the Loan Documents only in the event of the unanimous agreement of all Lenders.

(b) Other than as expressly provided for in Section 12.6(a)(i)-(iii), Collateral Agent may, if requested by the Required Lenders, from time to time designate covenants in this Agreement less restrictive by notification to a representative of Borrower.

(c) This Agreement and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement and the Loan Documents merge into this Agreement and the Loan Documents.

12.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.8 Survival. All covenants, representations and warranties made in this Agreement continue in full force and effect until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been satisfied. The obligation of Borrower in Section 12.2 to indemnify each Lender and Collateral Agent, as well as the confidentiality provisions in Section 12.9 below, shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

12.9 Confidentiality. In handling any confidential information of Borrower, the Lenders and Collateral Agent shall exercise the same degree of care that it exercises for their own proprietary information (but in no event less than reasonable care), but disclosure of information may be made: (a) subject to the terms and conditions of this Agreement, to the Lenders' and Collateral Agent' s Subsidiaries or Affiliates, or in connection with a Lender' s own financing or securitization transactions and upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction; (b) to prospective transferees (other than those identified in (a) above) or purchasers of any interest in the Credit Extensions (provided, however, the Lenders and Collateral Agent shall, except upon the occurrence and during the continuance of an Event of Default, obtain such prospective transferee' s or purchaser' s agreement to the terms of this provision or to similar confidentiality terms); (c) as required by law, regulation, subpoena, or other order; (d) to Lenders' or Collateral Agent' s regulators or as otherwise required in connection with an examination or audit; (e) as Collateral Agent reasonably considers appropriate in exercising remedies under the Loan Documents; and (f) to third party service providers of the Lenders and/or Collateral Agent so long as such service providers have executed a confidentiality agreement with the Lenders and Collateral Agent with terms no less restrictive than those contained herein. Confidential information does not include information that either: (i) is in the public domain or in the Lenders' and/or Collateral Agent' s possession when disclosed to the Lenders and/or Collateral Agent, or becomes part of the public domain after disclosure to the Lenders and/or Collateral Agent; or (ii) is disclosed to the Lenders and/or Collateral Agent by a third party, if the Lenders and/or Collateral Agent does not know that the third party is prohibited from disclosing the information. Collateral Agent and the Lenders may use confidential information for any purpose, including, without limitation, for the development of client databases, reporting purposes, and market analysis. The provisions of the immediately preceding sentence shall survive the termination of this Agreement. The agreements provided under this Section 12.9 supersede all prior agreements, understanding, representations, warranties, and negotiations between the parties about the subject matter of this Section 12.9.

12.10 Right of Set Off. Borrower hereby grants to Collateral Agent and to each Lender, a lien, security interest and right of set off as security for all Obligations to Collateral Agent and each Lender hereunder, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Collateral Agent or the Lenders or any entity under the control of Collateral Agent or the Lenders (including a Collateral Agent affiliate) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Collateral Agent or the Lenders may set off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE COLLATERAL AGENT TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.11 Square 1 Bank as Agent. Collateral Agent hereby appoints Bank as its agent (and Bank hereby accepts such appointment) for the purpose of perfecting Collateral Agent' s Liens in assets which, in accordance with Article 8 or Article 9, as applicable, of the Code can be perfected by possession or control, including without limitation, all Deposit Accounts maintained at Bank.

12.12 Cooperation of Borrower. If necessary, Borrower agrees to (i) execute any documents (including new Secured Promissory Notes) reasonably required to effectuate and acknowledge each assignment of a Term Loan Commitment or Loan to an assignee in accordance with Section 12.1, (ii) make Borrower' s management available to meet with Collateral Agent and prospective participants and assignees of Term Loan Commitments or Credit Extensions (which meetings shall be conducted no more often than twice every twelve months unless an Event of Default has occurred and is continuing), and (iii) assist Collateral Agent or the Lenders in the preparation of information relating to the financial affairs of Borrower as any prospective participant or assignee of a Term Loan Commitment or Term Loan reasonably may request. Subject to the provisions of Section 12.9, Borrower authorizes each Lender to disclose to any prospective participant or assignee of a Term Loan Commitment, any and all information in such Lender' s possession concerning Borrower and its financial affairs which has been delivered to such Lender by or on behalf of Borrower pursuant to this Agreement, or which has been delivered to such Lender by or on behalf of Borrower in connection with such Lender' s credit evaluation of Borrower prior to entering into this Agreement.

13. DEFINITIONS

13.1 Definitions. As used in this Agreement, the following terms have the following meanings:

"**Account**" is any "account" as defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

"**Account Debtor**" is any "account debtor" as defined in the Code with such additions to such term as may hereafter be made.

"**Advance**" or "**Advances**" means a cash advance or cash advances under the Revolving Line.

"**Affiliate**" of any Person is a Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person' s senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person' s managers and members.

"**Agreement**" is defined in the preamble hereof.

"**Amortization Date**" is February 1, 2014.

"**Ancillary Services**" is Letters of Credit or other treasury management services requested by Borrower and approved by Bank under the Revolving Line.

"**Ancillary Services Sublimit**" is a sublimit for Ancillary Services under the Revolving Line not to exceed Three Hundred Fifty Thousand Dollars ($350,000.00) for a Letter of Credit to support Borrower' s credit cards.

"**Annual Projections**" is defined in Section 6.2(a).

"**Anti-Terrorism Laws**" are any laws relating to terrorism or money laundering, including Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"**Approved Fund**" is any (i) investment company, fund, trust, securitization vehicle or conduit that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its business or (ii) any Person (other than a natural person) which temporarily

warehouses loans for any Lender or any entity described in the preceding clause (i) and that, with respect to each of the preceding clauses (i) and (ii), is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) a Person (other than a natural person) or an Affiliate of a Person (other than a natural person) that administers or manages a Lender.

"**Approved Lender**" is defined in Section 12.1.

"**Bank**" is defined in the preamble hereof.

"**Blocked Person**" is any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"**Borrower**" is defined in the preamble hereof.

"**Borrower' s Books**" are Borrower' s or any of its Subsidiaries' books and records including ledgers, federal, and state tax returns, records regarding Borrower' s or its Subsidiaries' assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Borrowing Base**" is an amount equal to eighty percent (80.00%) of Eligible Accounts, as determined by Bank with reference to the most recent Borrowing Base Certificate delivered by Borrower.

"**Borrowing Base Certificate**" is that certain certificate attached hereto as Exhibit D.

"**Business Day**" is any day that is not a Saturday, Sunday or a day on which Collateral Agent is closed.

"**Cash Equivalents**" are (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor' s Ratings Group or Moody' s Investors Service, Inc., and (c) certificates of deposit maturing no more than one (1) year after issue provided that the account in which any such certificate of deposit is maintained is subject to a Control Agreement in favor of Collateral Agent. For the avoidance of doubt, the direct purchase by Borrower or any of its Subsidiaries of any Auction Rate Securities, or purchasing participations in, or entering into any type of swap or other derivative transaction, or otherwise holding or engaging in any ownership interest in any type of Auction Rate Security by Borrower or any of its Subsidiaries shall be conclusively determined by the Lenders as an ineligible Cash Equivalent, and any such transaction shall expressly violate each other provision of this Agreement governing Permitted Investments. Notwithstanding the foregoing, Cash Equivalents does not include and Borrower, and each of its Subsidiaries, are prohibited from purchasing, purchasing participations in, entering into any type of swap or other equivalent derivative transaction, or otherwise holding or engaging in any ownership interest in any type of debt instrument, including, without limitation, any corporate or municipal bonds with a long-term nominal maturity for which the interest rate is reset through a dutch auction and more commonly referred to as an auction rate security (each, an "**Auction Rate Security**").

"**Charter**" means Borrower' s Second Amended and Restated Certificate of Incorporation filed with the Delaware Secretary of State on August 1, 2006, including all amendments thereto filed with the Delaware Secretary of State through March 13, 2011.

"**Claims**" are defined in Section 12.2.

"**Code**" is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of California; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Collateral Agent' s Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of California, the term "Code" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" is any and all properties, rights and assets of Borrower described on Exhibit A.

"**Collateral Account**" is any Deposit Account, Securities Account, or Commodity Account, or any other bank account maintained by Borrower or any Subsidiary at any time.

"**Collateral Agent**" is, Oxford, not in its individual capacity, but solely in its capacity as agent on behalf of and for the benefit of the Lenders.

"**Commitment Percentage**" is set forth in Schedule 1.1, as amended from time to time.

"**Commodity Account**" is any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"**Communication**" is defined in Section 10.

"**Compliance Certificate**" is that certain certificate in the form attached hereto as Exhibit C.

"**Contingent Obligation**" is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" is any control agreement entered into among the depository institution at which Borrower or any of its Subsidiaries maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower or any of its Subsidiaries maintains a Securities Account or a Commodity Account, Borrower and such Subsidiary, and Collateral Agent pursuant to which Collateral Agent obtains control (within the meaning of the Code) for the benefit of the Lenders over such Deposit Account, Securities Account, or Commodity Account.

"**Copyrights**" are any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

"**Credit Extension**" is any Term Loan, each Advance, Ancillary Service or any other extension of credit by Collateral Agent or any Lender for Borrower' s benefit.

"**Current Liabilities**" is, as of any applicable date, all amounts that should, in accordance with GAAP, be included as current liabilities on the consolidated balance sheet of Borrower and its Subsidiaries, as at such date, plus, to the extent not already included therein, undrawn Letters of Credit and Borrower' s maximum potential obligations under the Ancillary Services Sublimit, if any, but specifically excluding any cash-secured Obligations.

"**Default Rate**" is defined in Section 2.3(b).

"**Deposit Account**" is any "deposit account" as defined in the Code with such additions to such term as may hereafter be made.

"**Designated Deposit Account**" is Borrower' s deposit account, account number , maintained with Bank.

"**Disbursement Letter**" is that certain form attached hereto as Exhibit B-1.

"**Dollars**," "**dollars**" and "$" each mean lawful money of the United States.

"**Effective Date**" is defined in the preamble of this Agreement.

"**Eligible Accounts**" means those Accounts that arise in the ordinary course of Borrower' s business that comply with all of Borrower' s representations and warranties to Bank set forth in Section 5.2; provided, that Bank may reasonably change the standards of eligibility by giving Borrower 30 days prior written notice. Unless otherwise agreed to by Bank, Eligible Accounts shall not include the following:

(a) Account credit balances greater than 90 days from invoice date;

(b) Accounts with respect to an account debtor, 25% of whose Accounts the account debtor has failed to pay within 120 days of invoice date;

(c) Accounts with respect to an account debtor, including Subsidiaries and Affiliates, whose total obligations to Borrower exceed 25% of all Accounts, to the extent such obligations exceed the aforementioned percentage, except as approved in writing by Bank;

(d) Accounts with respect to which the account debtor does not have its principal place of business in the United States, except for Eligible Foreign Accounts;

(e) Accounts with respect to which the account debtor is the United States or any department, agency, or instrumentality of the United States (other than Medicare and Medicaid accounts which do not fall under clauses (k) and (l) below);

(f) Accounts with respect to which Borrower is liable to the account debtor for goods sold or services rendered by the account debtor to Borrower, but only to the extent of any amounts owing to the account debtor against amounts owed to Borrower;

(g) Accounts with respect to which the account debtor is an officer, employee, agent or Affiliate of Borrower;

(h) Accounts with respect to which goods are placed on consignment, guaranteed sale, sale or return, sale on approval, bill and hold, demo or promotional, or other terms by reason of which the payment by the account debtor may be conditional;

(i) "Advanced Billings," i.e., accounts that have not yet been billed to the account debtor or that relate to deposits (such as good faith deposits) or other property of the account debtor held by Borrower for the performance of services or delivery of goods which Borrower has not yet performed or delivered;

(j) Accounts with respect to which the account debtor disputes liability or makes any claim with respect thereto as to which Bank believes, in its sole discretion, that there may be a basis for dispute (but only to the extent of the amount subject to such dispute or claim), or is subject to any Insolvency Proceeding, or becomes insolvent, or goes out of business;

(k) Medicare account balances aged greater than 60 days after test completion date;

(l) Medicaid account balances greater than 90 days after test completion date;

(m) Account balances other than Medicare or Medicaid that are more than 120 days after test completion date;

(n) Accounts arising from personal injury claims;

(o) Accounts the collection of which Bank reasonably determines after inquiry and consultation with Borrower to be doubtful;

(p) Retentions and hold-backs (including contractual allowances and bad debt reserves); and

(q) "Project Billings," i.e., accounts that are billed based on project milestones and not on actual time and materials bases.

"**Eligible Assignee**" is (i) a Lender, (ii) an Affiliate of a Lender, (iii) an Approved Fund and (iv) any commercial bank, savings and loan association or savings bank or any other entity which is an "accredited investor" (as defined in Regulation D under the Securities Act of 1933, as amended) and which extends credit or buys loans as one of its businesses, including insurance companies, mutual funds, lease financing companies and commercial finance companies, in each case, which either (A) has a rating of BBB or higher from Standard & Poor' s Rating Group and a rating of Baa2 or higher from Moody' s Investors Service, Inc. at the date that it becomes a Lender or (B) has total assets in excess of Five Billion Dollars ($5,000,000,000.00), and in each case of clauses (i) through (iv), which, through its applicable lending office, is capable of lending to Borrower without the imposition of any withholding or similar taxes; provided that notwithstanding the foregoing, "Eligible Assignee" shall not include, unless an Event of Default has occurred and is continuing, (i) Borrower or any of Borrower' s Affiliates or Subsidiaries or (ii) a direct competitor of Borrower or a vulture hedge fund, each as determined by Collateral Agent. Notwithstanding the foregoing, (x) in connection with assignments by a Lender due to a forced divestiture at the request of any regulatory agency, the restrictions set forth herein shall not apply and Eligible Assignee shall mean any Person or party and (y) in connection with a Lender' s own financing or securitization transactions, the restrictions set forth herein shall not apply and Eligible Assignee shall mean any Person or party providing such financing or formed to undertake such securitization transaction and any transferee of such Person or party upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction; provided that no such sale, transfer, pledge or assignment under this clause (y) shall release such Lender from any of its obligations hereunder or substitute any such Person or party for such Lender as a party hereto until Collateral Agent shall have received and accepted an effective assignment agreement from such Person or party in form satisfactory to Collateral Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee as Collateral Agent reasonably shall require.

"**Eligible Foreign Accounts**" means Accounts with respect to which the account debtor does not have its principal place of business in the United States and that are (i) supported by one or more letters of credit in an amount and of a tenor, and issued by a financial institution, acceptable to Bank, (ii) insured by the Export Import Bank of the United States, (iii) generated by an account debtor with its principal place of business in Canada, provided that the Bank has perfected its security interest in the appropriate Canadian province, or (iv) approved by Bank on a case-by-case basis. All Eligible Foreign Accounts must be calculated in U.S. Dollars.

"**Equipment**" is all "equipment" as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"**ERISA**" is the Employee Retirement Income Security Act of 1974, as amended, and its regulations.

"**Existing Indebtedness**" is the indebtedness of Borrower to Square 1 Bank in the aggregate principal outstanding amount as of the Effective Date of approximately Seven Million Three Hundred Thousand Dollars ($7,300,000) pursuant to that certain Loan and Security Agreement, dated February 7, 2008, entered into by and between Square 1 Bank and Borrower.

"**Event of Default**" is defined in Section 8.

"**Final Payment**" is a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest) due on the earliest to occur of (a) the Maturity Date, or (b) the acceleration of any Term Loan, or (c) the prepayment of a Term Loan pursuant to Section 2.2(a)(iii) or 2.2(a)(iv), equal to (x) Five Hundred Thousand Dollars ($500,000.00) for the account of Oxford and (y) Sixty Thousand Dollars ($60,000.00) for the account of Square 1.

"**Funding Date**" is any date on which a Credit Extension is made to or on account of Borrower which shall be a Business Day.

"**GAAP**" is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession in the United States, which are applicable to the circumstances as of the date of determination.

"**General Intangibles**" are all "general intangibles" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, trademarks, service marks and, to the extent permitted under applicable law, any applications therefor, whether registered or not, any trade secret rights, including any rights to unpatented inventions, payment intangibles, royalties, contract rights, goodwill, franchise agreements, purchase orders, customer lists, route lists, telephone numbers, domain names, claims, income and other tax refunds, security and other deposits, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"**Governmental Approval**" is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

"**Governmental Authority**" is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Guarantor**" is any Person providing a Guaranty in favor of Collateral Agent.

"**Guaranty**" is any guarantee of all or any part of the Obligations, as the same may from time to time be amended, restated, modified or otherwise supplemented.

"**Indebtedness**" is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

"**Indemnified Person**" is defined in Section 12.2.

"**Insolvency Proceeding**" is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Insolvent**" means not Solvent.

"**Intellectual Property**" means all of Borrower' s or any Subsidiary' s right, title and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how, operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to Borrower;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

"**Inventory**" is all "inventory" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of any Person' s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"**Investment**" is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance, payment or capital contribution to any Person.

"**Key Person**" is each of Borrower' s (i) President and Chief Executive Officer, who is Richard O. Brajer as of the Effective Date, (ii) Executive Vice President and Chief Financial Officer, who is Lucy G. Martindale as of the Effective Date and (iii) Chief Operating Officer, who is Timothy J. Fischer as of the Effective Date.

"**Lender**" is any one of the Lenders.

"**Lenders**" are the Persons identified on Schedule 1.1 hereto and each assignee that becomes a party to this Agreement pursuant to Section 12.1.

"**Lenders' Expenses**" are all audit fees and expenses, costs, and expenses (including reasonable attorneys' fees and expenses, as well as appraisal fees, fees incurred on account of lien searches, inspection fees, and filing fees) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred by Collateral Agent and/or the Lenders in connection with the Loan Documents.

"**Letter of Credit**" is a standby or commercial letter of credit issued by Bank upon request of Borrower based upon an application, guarantee, indemnity, or similar agreement.

"**Lien**" is a claim, mortgage, deed of trust, levy, charge, pledge, security interest, or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

"**Loan Advance/Paydown Request Form**" is that certain form attached hereto as Exhibit B-2.

"**Loan Documents**" are, collectively, this Agreement, the Warrants, the Perfection Certificates, each Compliance Certificate, each Disbursement Letter, each Loan Advance/Paydown Request Form, any subordination agreements, any note, or notes or guaranties executed by Borrower or any other Person, and any other present or future agreement entered into by Borrower, any Guarantor or any other Person for the benefit of the Lenders and Collateral Agent in connection with this Agreement; all as amended, restated, or otherwise modified.

"**Material Adverse Change**" is (a) a material impairment in the perfection or priority of Collateral Agent' s Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations or condition (financial or otherwise) or prospects of Borrower or any Subsidiary; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

"**Maturity Date**" is the date which is the earliest of (a) twenty-nine (29) months after the Amortization Date; (b) early termination of this Agreement, whether as a result of acceleration, prepayment or otherwise or (c) the Revolving Maturity Date.

"**Obligations**" are all of Borrower' s obligations to pay when due any debts, principal, interest, Lenders' Expenses, the Prepayment Fee, the Final Payment, and other amounts Borrower owes the Lenders now or later, in connection with, related to, following, or arising from, out of or under, this Agreement or, the other Loan Documents (other than the Warrants), or otherwise, including, without limitation, all obligations relating to letters of credit (including reimbursement obligations for drawn and undrawn letters of credit), cash management services, and foreign exchange contracts, if any, and including interest accruing after Insolvency Proceedings begin (whether or not allowed) and debts, liabilities, or obligations of Borrower assigned to the Lenders and/or Collateral Agent, and the performance of Borrower' s duties under the Loan Documents (other than the Warrants).

"**OFAC**" is the U.S. Department of Treasury Office of Foreign Assets Control.

"**OFAC Lists**" are, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"**Operating Documents**" are, for any Person, such Person' s formation documents, as certified by the Secretary of State (or equivalent agency) of such Person' s jurisdiction of organization on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"**Patents**" means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

"**Payment Date**" is the first (1st) calendar day of each calendar month, commencing on February 1, 2013.

"**Perfection Certificate**" and "**Perfection Certificates**" is defined in Section 5.1.

"**Permitted Indebtedness**" is:

(a) Borrower' s Indebtedness to the Lenders and Collateral Agent under this Agreement and the other Loan Documents;

(b) Indebtedness existing on the Effective Date and disclosed on the Perfection Certificate(s);

(c) Subordinated Debt;

(d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;

(e) Indebtedness consisting of capitalized lease obligations and purchase money Indebtedness, in each case incurred by Borrower or any of its Subsidiaries to finance the acquisition, repair, improvement or construction of fixed or capital assets of such person, provided that (i) the aggregate outstanding principal amount of all such Indebtedness does not exceed Two Hundred Fifty Thousand Dollars ($250,000.00) at any time and (ii) the principal amount of such Indebtedness does not exceed the lower of the cost or fair market value of the property so acquired or built or of such repairs or improvements financed with such Indebtedness (each measured at the time of such acquisition, repair, improvement or construction is made); and

(f) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (e) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose materially more burdensome terms upon Borrower, or its Subsidiary, as the case may be.

"**Permitted Investments**" are:

(a) Investments disclosed on the Perfection Certificate(s) and existing on the Effective Date;

(b) (i) Investments consisting of cash and Cash Equivalents, and (ii) any Investments permitted by Borrower' s investment policy, as amended from time to time, provided that such investment policy (and any such amendment thereto) has been approved in writing by Collateral Agent;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(d) Investments consisting of Deposit Accounts in which Collateral Agent has a perfected security interest;

(e) Investments in connection with Transfers permitted by Section 7.1;

(f) Investments of Subsidiaries in or to other Subsidiaries or Borrower and Investments by Borrower in Subsidiaries not to exceed Two Hundred Fifty Thousand Dollars ($250,000.00) in the aggregate in any fiscal year;

(g) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower' s Board of Directors; not to exceed Two Hundred Fifty Thousand Dollars ($250,000.00) in the aggregate for (i) and (ii) in any fiscal year;

(h) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;

(i) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (i) shall not apply to Investments of Borrower in any Subsidiary;

(j) Investments in unfinanced capital expenditures in any fiscal year, not to exceed Two Hundred Fifty Thousand Dollars ($250,000.00);

(k) non-cash Investments in joint ventures or strategic alliances in the ordinary course of Borrower' s business consisting of the non-exclusive licensing of technology, the development of technology or the providing of technical support; and

(l) Investments permitted under Section 7.3.

"**Permitted Licenses**" are (A) licenses of over-the-counter software that is commercially available to the public, and (B) non-exclusive and exclusive licenses for the use of the Intellectual Property of Borrower or any of its Subsidiaries entered into in the ordinary course of business, provided, that, with respect to each such license described in clause (B), (i) no Event of Default has occurred or is continuing at the time of such license; (ii) the license constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment of any Intellectual Property and do not restrict the ability of Borrower or any of its Subsidiaries, as applicable, to pledge, grant a security interest in or lien on, or assign or otherwise Transfer any Intellectual Property; (iii) in the case of any exclusive license, (x) Borrower delivers twenty (20) days' prior written notice and a brief summary of the terms of the proposed license to Collateral Agent and the Lenders and delivers to Collateral Agent and the Lenders copies of the final executed licensing documents in connection with the exclusive license promptly upon consummation thereof, (y) any such license is made in connection with a bona fide corporate collaboration or partnership, and is approved by Borrower' s (or the applicable Subsidiary' s) board of directors, and (z) any such license could not result in a legal transfer of title of the licensed property but may be exclusive in respects other than territory and may be exclusive as to territory only as to discrete geographical areas outside of the United States; and (iv) all upfront payments, royalties, milestone payments or other proceeds arising from the licensing agreement that are payable to Borrower or any of its Subsidiaries are paid to a Deposit Account that is governed by a Control Agreement.

"**Permitted Liens**" are:

(a) Liens existing on the Effective Date and disclosed on the Perfection Certificates or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower maintains adequate reserves on its Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) liens securing Indebtedness permitted under clause (e) of the definition of "**Permitted Indebtedness**," provided that (i) such liens exist prior to the acquisition of, or attach substantially simultaneous with, or within twenty (20) days after the, acquisition, lease, repair, improvement or construction of, such property financed or leased by such Indebtedness and (ii) such liens do not extend to any property of Borrower other than the property (and proceeds thereof) acquired, leased or built, or the improvements or repairs, financed by such Indebtedness;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Fifty Thousand Dollars ($50,000.00), and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (c), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase;

(g) leases or subleases of real property granted in the ordinary course of Borrower' s business (or, if referring to another Person, in the ordinary course of such Person' s business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower' s business (or, if referring to another Person, in the ordinary course of such Person' s business), if the leases, subleases, licenses and sublicenses do not prohibit granting Collateral Agent or any Lender a security interest therein;

(h) banker' s liens, rights of setoff and Liens in favor of financial institutions incurred in the ordinary course of business arising in connection with Borrower' s deposit accounts or securities accounts held at such institutions solely to secure payment of fees and similar costs and expenses and provided such accounts are maintained in compliance with Section 6.6(b) hereof;

(i) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 8.4 or 8.7; and

(j) Liens consisting of Permitted Licenses.

"**Person**" is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Placement Location**" means any third party location where Borrower places a Vantera machine with such third party for use in the ordinary course of such third party' s business in an arms-length transaction and on fair and reasonable terms, which placement is consistent with Borrower' s practices for placement of Ventera machines as of the Effective Date.

"**Prepayment Fee**" is, with respect to any Term Loan subject to prepayment prior to the Prepayment Fee End Date, whether by mandatory or voluntary prepayment, acceleration or otherwise, an additional fee payable to the Lenders in amount equal to:

(i) for a prepayment made on or after the Funding Date of such Term Loan through and including the first anniversary of the Funding Date of such Term Loan, three percent (3.00%) of the principal amount of such Term Loan prepaid;

(ii) for a prepayment made after the date which is after the first anniversary of the Funding Date of such Term Loan through and including the second anniversary of the Funding Date of such Term Loan, two percent (2.00%) of the principal amount of the Term Loans prepaid; and

(iii) for a prepayment made after the date which is after the second anniversary of the Funding Date of such Term Loan and prior to the Prepayment Fee End Date, one percent (1.00%) of the principal amount of the Term Loans prepaid.

"**Prepayment Fee End Date**" is the date which is twenty-nine (29) months after the Amortization Date.

"**Prime Rate**" means the variable rate of interest, per annum, most recently announced by Bank, as its "prime rate," whether or not such announced rate is the lowest rate available from Bank.

"**Pro Rata Share**" is, as of any date of determination, with respect to each Lender, a percentage (expressed as a decimal, rounded to the ninth decimal place) determined by dividing the outstanding principal amount of Term Loans held by such Lender by the aggregate outstanding principal amount of all Term Loans.

"**Qualified Public Offering**" means an underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of the Borrower' s common stock yielding aggregate gross proceeds to the Borrower (before deducting underwriting discounts) of not less than Forty Million Dollars ($40,000,000)

"**Quick Ratio**" means the ratio of (a) unrestricted cash at Bank, subject to Control Agreements, plus the Borrowing Base, to (b) Current Liabilities.

"**Registered Organization**" is any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

"**Required Lenders**" means (i) for so long as all of the Persons that are Lenders on the Effective Date (each an "**Original Lender**") have not assigned or transferred any of their interests in their Credit Extensions, Lenders holding one hundred percent (100%) of the aggregate outstanding principal balance of the Credit Extensions, or (ii) at any time from and after any Original Lender has assigned or transferred any interest in its Credit Extensions, Lenders holding at least sixty six percent (66%) of the aggregate outstanding principal balance of the Credit Extensions and, in respect of this clause (ii), (A) each Original Lender that has not assigned or transferred any portion of its Credit Extensions, (B) each assignee or transferee of an Original Lender' s interest in the Credit Extensions, but only to the extent that such assignee or transferee is an Affiliate or Approved Fund of such Original Lender, and (C) any Person providing financing to any Person described in clauses (A) and (B) above; provided, however, that this clause (C) shall only apply upon the occurrence of a default, event of default or similar occurrence with respect to such financing.

"**Requirement of Law**" is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"**Responsible Officer**" is any of the President, Chief Executive Officer, or Chief Financial Officer of Borrower acting alone.

"**Revenue**" means revenue recognized in accordance with GAAP.

"**Revolving Line**" means a Credit Extension of up to Six Million Dollars ($6,000,000.00) (inclusive of any amounts outstanding under the Ancillary Services Sublimit).

"**Revolving Maturity Date**" means the earliest of (a) December 19, 2013; (b) early termination of this Agreement, whether as a result of acceleration, prepayment or otherwise or (c) the Maturity Date.

"**Secured Promissory Note**" is defined in Section 2.4.

"**Secured Promissory Note Record**" is a record maintained by each Lender with respect to the outstanding Obligations owed by Borrower to Lender and credits made thereto.

"**Securities Account**" is any "securities account" as defined in the Code with such additions to such term as may hereafter be made.

"**Solvent**" is, with respect to any Person: the fair salable value of such Person' s consolidated assets (including goodwill minus disposition costs) exceeds the fair value of such Person' s liabilities; such Person is not left with unreasonably small capital after the transactions in this Agreement; and such Person is able to pay its debts (including trade debts) as they mature.

"**Subordinated Debt**" is indebtedness incurred by Borrower or any of its Subsidiaries subordinated to all Indebtedness of Borrower and/or its Subsidiaries to the Lenders (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Collateral Agent and the Lenders entered into between Collateral Agent, Borrower, and/or any of its Subsidiaries, and the other creditor), on terms acceptable to Collateral Agent and the Lenders.

"**Subsidiary**" is, with respect to any Person, any Person of which more than fifty percent (50%) of the voting stock or other equity interests (in the case of Persons other than corporations) is owned or controlled, directly or indirectly, by such Person or through one or more intermediaries.

"**Term Loan**" is defined in Section 2.2(a)(i) hereof.

"**Term Loan Commitment**" is, for any Lender, the obligation of such Lender to make a Term Loan, up to the principal amount shown on Schedule 1.1. "**Term Loan Commitments**" means the aggregate amount of such commitments of all Lenders.

"**Trademarks**" means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

"**Transfer**" is defined in Section 7.1.

"**Warrants**" are those certain Warrants to Purchase Stock dated as of the Effective Date, or any date thereafter, issued by Borrower in favor of each Lender or such Lender' s Affiliates.

"**Wells Fargo Letter of Credit**" means that certain letter of credit issued by Wells Fargo Bank, N.A on behalf of Borrower in favor of Raleigh Portfolio JH-SBP, LLC, provided that the principal amount of such letter of credit at no time exceeds One Million Five Hundred Thousand Dollars ($1,500,000).

"**Wells Fargo Letter of Credit Account**" means that certain account (account no.) held by Borrower at Wells Fargo Bank, N.A. as collateral for the Wells Fargo Letter of Credit; provided that the aggregate amount held in such account at no time exceeds one hundred percent (100%) of the amount of the Wells Fargo Letter of Credit from time to time.

"**Wells Fargo Letter of Credit Sweep Account**" means that certain account (account no.) held by Borrower at Wells Fargo Bank, N.A. in connection with the Wells Fargo Letter of Credit; into which interest generated from the Wells Fargo Letter of Credit Account is swept; provided that the aggregate amount held in such account at no time exceeds Seven Thousand Five Hundred Dollars ($7,500).

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

BORROWER:

LIPOSCIENCE, INC.

By /s/ Lucy G. Martindale
Name: Lucy G. Martindale
Title: Executive Vice President & Chief Financial Officer

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By /s/ Mark Davis
Name: Mark Davis
Title: Vice President - Finance, Secretary & Treasurer

LENDER:

SQUARE 1 BANK

By /s/ Mara Huntington
Name: Mara Huntington
Title: SVP

[*Signature Page to Loan and Security Agreement*]

SCHEDULE 1.1

Lenders and Commitments

Term Loans

Lender	Term Loan Commitment	Commitment Percentage
OXFORD FINANCE LLC	$ 10,000,000.00	62.50 %
SQUARE 1 BANK	$ 6,000,000.00	37.50 %
TOTAL	**$ 16,000,000.00**	**100.00 %**

Revolving Line

Lender	Revolving Line Commitment	Commitment Percentage
SQUARE 1 BANK	$ 6,000,000.00	100.00 %
TOTAL	**$ 6,000,000.00**	**100.00 %**

EXHIBIT A

Description of Collateral

The Collateral consists of all of Borrower' s right, title and interest in and to the following personal property:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as noted below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts and other Collateral Accounts, all certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

All Borrower' s Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include any Intellectual Property; provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Collateral Agent' s security interest in such Accounts and such other property of Borrower that are proceeds of the Intellectual Property.

Pursuant to the terms of a certain negative pledge arrangement with Collateral Agent and the Lenders, Borrower has agreed not to encumber any of its Intellectual Property.

EXHIBIT B-1

Form of Disbursement Letter

[see attached]

DISBURSEMENT LETTER

December 20, 2012

The undersigned, being the duly elected and acting of LIPOSCIENCE, INC., a Delaware corporation with offices located at 2500 Sumner Boulevard, Raleigh, NC 27616 ("**Borrower**"), does hereby certify to **OXFORD FINANCE LLC** ("**Oxford**" and "**Lender**"), as collateral agent (the "**Collateral Agent**") in connection with that certain Loan and Security Agreement dated as of December 20, 2012, by and among Borrower, Collateral Agent and the Lenders from time to time party thereto (the "**Loan Agreement**"; with other capitalized terms used below having the meanings ascribed thereto in the Loan Agreement) that:

1. The representations and warranties made by Borrower in Section 5 of the Loan Agreement and in the other Loan Documents are true and correct in all material respects as of the date hereof.

2. No event or condition has occurred that would constitute an Event of Default under the Loan Agreement or any other Loan Document.

3. Borrower is in compliance with the covenants and requirements contained in Sections 4, 6 and 7 of the Loan Agreement.

4. All conditions referred to in Section 3 of the Loan Agreement to the making of the Loan to be made on or about the date hereof have been satisfied or waived by Collateral Agent.

5. No Material Adverse Change has occurred.

6. The undersigned is a Responsible Officer.

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7. The proceeds of the Term Loan shall be disbursed as follows:

Disbursement from Oxford:	
Loan Amount	$ 10,000,000.00
Plus:	
−Deposit Received	[$100,000.00]
Less:	
−Facility Fee	($100,000.00)
[−Interim Interest	($)]
−Lender' s Legal Fees	($)*
Net Proceeds due from Oxford:	**$**
Disbursement from Square 1:	
Loan Amount	$ 6,000,000.00
Plus:	
−Deposit Received	$ [20,000.00]
Less:	
−Facility Fee	($20,000.00)
−Existing Debt Payoff to be remitted to Square 1 Bank per the Payoff Letter dated December 20, 2012	($)
[−Interim Interest	($)]
Net Proceeds due from Square 1:	**$**
TOTAL TERM LOAN NET PROCEEDS FROM LENDERS	**$**

8. The Term Loan shall amortize in accordance with the Amortization Table attached hereto.

9. The proceeds of the **Revolving Line** shall be disbursed as follows:

Disbursement from Square 1:	
Loan Amount	$ [6,000,000.00]
Less:	
[−Interim Interest	($)]
Net Proceeds due from Square 1:	**$**

10. The aggregate net proceeds of the Term Loans shall be transferred to the Designated Deposit Account as follows:

Account Name:	LIPOSCIENCE, INC.
Bank Name:	SQUARE 1 BANK
Bank Address:	406 Blackwell Street, Suite 240 Durham, North Carolina 27701
Account Number:	[ ]
ABA Number:	[ ]

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* Legal fees and costs are through the Effective Date. Post-closing legal fees and costs, payable after the Effective Date, to be invoiced and paid post-closing.

Dated as of the date first set forth above.

BORROWER:

LIPOSCIENCE, INC.

By _____
Name: _____
Title: _____

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By: _____
Name: _____
Title: _____

LENDER:
SQUARE 1 BANK

By: _____
Name: _____
Title: _____

[*Signature Page to Disbursement Letter*]

EXHIBIT B-2

LOAN ADVANCE/PAYDOWN REQUEST FORM

DEADLINE FOR SAME DAY PROCESSING IS 5:30 P.M. Eastern Time*

FORMULA BASED LINES: DEADLINE FOR NEXT DAY PROCESSING IS 5:30 P.M. Eastern Time

DEADLINE FOR WIRE TRANSFERS IS 4:30 P.M., Eastern Time

**At month end and the day before a holiday, the cut off time is 1:30 P.M., Eastern Time*

***Subject to 3 day advance notice.*

TO: Loan Analysis DATE: TIME:

FAX #:

FROM: LIPOSCIENCE, INC.
Borrower' s Name

FROM:
Authorized Signer' s Name

FROM:
Authorized Signature (Borrower)

PHONE #:

TELEPHONE REQUEST (For Bank Use Only):

The following person is authorized to request the loan payment transfer/loan advance on the designated account and is known to me.

Authorized Request & Phone #

Received by (Bank) & Phone #

Authorized Signature (Bank)

FROM ACCOUNT#:
(please include Note number, if applicable)

TO ACCOUNT #:
(please include Note number, if applicable)

REQUESTED TRANSACTION TYPE	REQUESTED DOLLAR AMOUNT	For Bank Use Only
PRINCIPAL INCREASE* (ADVANCE)	$	Date Rec' d:
PRINCIPAL PAYMENT (ONLY)	$	Time:
		Comp. Status: YES NO
OTHER INSTRUCTIONS:		Status Date:
		Time:
		Approval:

All representations and warranties of Borrower stated in the Loan Agreement are true, correct and complete in all material respects as of the date of the telephone request for and advance confirmed by this Loan Advance/Paydown Request Form; provided, however, that those representations and warranties the date expressly referring to another date shall be true, correct and complete in all material respects as of such date.

***IS THERE A WIRE REQUEST TIED TO THIS LOAN ADVANCE? (PLEASE CIRCLE ONE) YES NO**

If YES, the Outgoing Wire Transfer Instructions must be completed below.

OUTGOING WIRE TRANSFER INSTRUCTIONS Fed Reference Number Bank Transfer Number

The items marked with an asterisk (*) are required to be completed.

*Beneficiary Name
*Beneficiary Account Number
*Beneficiary Address
Currency Type US DOLLARS ONLY

*ABA Routing Number (9 Digits)
*Receiving Institution Name
*Receiving Institution Address
*Wire Account $

EXHIBIT C

Compliance Certificate

TO: OXFORD FINANCE LLC, as Collateral Agent and Lender
SQUARE 1 BANK, as Lender

FROM:LIPOSCIENCE, INC.

The undersigned authorized officer ("**Officer**") of LIPOSCIENCE, INC. ("**Borrower**"), hereby certifies that in accordance with the terms and conditions of the Loan and Security Agreement by and among Borrower, Collateral Agent, and the Lenders from time to time party thereto (the "**Loan Agreement**;" capitalized terms used but not otherwise defined herein shall have the meanings given them in the Loan Agreement),

(a) Borrower is in complete compliance for the period ending with all required covenants except as noted below;

(b) There are no Events of Default, except as noted below;

(c) Except as noted below, all representations and warranties of Borrower stated in the Loan Documents are true and correct in all material respects on this date and for the period described in (a), above; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date.

(d) Borrower, and each of Borrower' s Subsidiaries, has timely filed all required tax returns and reports, Borrower, and each of Borrower' s Subsidiaries, has timely paid all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower, or Subsidiary, except as otherwise permitted pursuant to the terms of Section 5.8 of the Loan Agreement;

(e) No Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Collateral Agent and the Lenders.

Attached are the required documents, if any, supporting our certification(s). The Officer, on behalf of Borrower, further certifies that the attached financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) and are consistently applied from one period to the next except as explained in an accompanying letter or footnotes and except, in the case of unaudited financial statements, for the absence of footnotes and subject to year-end audit adjustments as to the interim financial statements.

Please indicate compliance status since the last Compliance Certificate by circling Yes, No, or N/A under "Complies" column.

	Reporting Covenant	Requirement	Actual	Complies		
1)	Financial statements	Monthly within 30 days		Yes	No	N/A
2)	Annual (CPA Audited) statements	Within 180 days after FYE		Yes	No	N/A
3)	Annual Financial Projections/Budget (prepared on a monthly basis)	Annually (within 10 days of FYE), and when revised		Yes	No	N/A
4)	Borrowing Base Certificate; A/R & A/P agings	Monthly within 30 days		Yes	No	N/A
5)	8-K, 10-K and 10-Q Filings	If applicable, within 5 days of filing		Yes	No	N/A
6)	Compliance Certificate	Monthly within 30 days		Yes	No	N/A
7)	IP Report	When required		Yes	No	N/A
8)	Vantera Machines Report	At close; annually, each March 31		Yes	No	N/A
9)	Total amount of Borrower' s cash and cash equivalents at the last day of the measurement period		$_____	Yes	No	N/A
10)	Total amount of Borrower' s Subsidiaries' cash and cash equivalents at the last day of the measurement period		$_____	Yes	No	N/A

Deposit and Securities Accounts

(Please list all accounts; attach separate sheet if additional space needed)

	Institution Name	Account Number	New Account?		Account Control Agreement in place?	
1)			Yes	No	Yes	No
2)			Yes	No	Yes	No
3)			Yes	No	Yes	No
4)			Yes	No	Yes	No

Financial Covenants

	Covenant	Requirement	Actual	Compliance	
1)	Minimum Revenues; to Plan (trailing three months)	At least 80% of projections	_____%	Yes	No
2)	Minimum Quick Ratio	At least 1.25:1.00 (from the Effective Date thru 2/28/13)*	____to 1.00	Yes	No

* 1.10 to 1.00; 3/1/13 thru 6/30/13
1.00to 1.00; 7/1/13 and thereafter

Other Matters

1) Have there been any changes in management since the last Compliance Certificate? Yes No

2) Have there been any transfers/sales/disposals/retirement of Collateral or IP prohibited by the Loan Agreement? Yes No

3) Have there been any new or pending claims or causes of action against Borrower that involve more than Two Hundred Fifty Thousand Dollars ($250,000.00)? Yes No

4) Have there been any amendments of or other changes to the capitalization table of Borrower and to the Operating Documents of Borrower or any of its Subsidiaries? If yes, provide copies of any such amendments or changes with this Compliance Certificate. Yes No

Exceptions

Please explain any exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions." Attach separate sheet if additional space needed.)

LIPOSCIENCE, INC.

By: _____

Name: _____

Title: _____

Date:

LENDER USE ONLY

Received by: _____ Date: _____

Verified by: _____ Date: _____

Compliance Status: Yes No

EXHIBIT D

Borrowing Base Certificate

[*Please refer to New Borrower Kit*]

EXHIBIT E

Form of Secured Promissory Note

[see attached]

SECURED PROMISSORY NOTE
(Term Loan)

$[5][6],000,000.00 Dated: December , 2012

FOR VALUE RECEIVED, the undersigned, LIPOSCIENCE, INC., a Delaware corporation with offices located at 2500 Sumner Boulevard, Raleigh, NC 27616 ("**Borrower**") HEREBY PROMISES TO PAY to the order of [OXFORD FINANCE LLC][SQUARE 1 BANK] ("**Lender**") the principal amount of [FIVE][SIX] MILLION DOLLARS ($[5][6],000,000.00) or such lesser amount as shall equal the outstanding principal balance of the Term Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated December 20, 2012 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this "**Note**"). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2(a)(iii) and Section 2.2(a)(iv) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term Loan, interest on the Term Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower' s obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

[Balance of Page Intentionally Left Blank]

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

LIPOSCIENCE, INC.

By _____
Name: _____
Title: _____

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date	Principal Amount	Interest Rate	Scheduled Payment Amount	Notation By

SECURED PROMISSORY NOTE
(Revolving Line)

$6,000,000.00 Dated: December , 2012

FOR VALUE RECEIVED, the undersigned, LIPOSCIENCE, INC., a Delaware corporation with offices located at 2500 Sumner Boulevard, Raleigh, NC 27616 ("**Borrower**") HEREBY PROMISES TO PAY to the order of SQUARE 1 BANK ("**Lender**") the principal amount of SIX MILLION DOLLARS ($6,000,000.00) or such lesser amount as shall equal the outstanding principal balance of the Advances made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Advances, at the rates and in accordance with the terms of the Loan and Security Agreement dated December 20, 2012 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Revolving Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Advances, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this "**Note**"). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of secured Advances by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Advances, interest on the Advances and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower' s obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

[Balance of Page Intentionally Left Blank]

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

LIPOSCIENCE, INC.

By _____
Name: _____
Title: _____

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date	Principal Amount	Interest Rate	Scheduled Payment Amount	Notation By

Exhibit 10.2

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW.

WARRANT TO PURCHASE STOCK

Corporation:	LIPOSCIENCE, INC.
Number of Shares:	27,586 (Subject to Section 1.7)
Class of Stock:	Series E Convertible Preferred (Subject to Section 1.7)
Initial Exercise Price:	$4.35 per share (Subject to Section 1.7)
Issue Date:	December 20, 2012
Expiration Date:	December 20, 2022

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, **SQUARE 1 BANK** or its assignee ("***Holder***") is entitled to purchase the number of fully paid and nonassessable shares of the class of securities (the "***Shares***") of the corporation (the "***Company***") at the initial exercise price per Share (the "***Warrant Price***") all as set forth above and as adjusted pursuant to Article 2 of this warrant, subject to the provisions and upon the terms and conditions set forth in this warrant.

ARTICLE 1

EXERCISE

1.1 Method of Exercise. Holder may exercise this warrant by delivering this warrant and a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to the Company a check for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this warrant as specified in Section 1.1, Holder may from time to time convert this warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of the Shares or other securities otherwise issuable upon exercise of this warrant minus the aggregate Warrant Price of such Shares by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Shares are traded regularly in a public market, the fair market value of the Shares shall be the closing price of the Shares (or the closing price of the Company' s stock into which the Shares are convertible) reported for the business day immediately before Holder delivers its Notice of Exercise to the Company. If the Shares are not regularly traded in a public market, the Board of Directors of the Company shall determine fair market value in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this warrant, the Company shall deliver to Holder certificates for the Shares acquired and, if this warrant has not been fully exercised or converted and has not expired, a new warrant representing the Shares not so acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, on surrender and cancellation of this warrant, the Company at its expense shall execute and deliver, in lieu of this warrant, a new warrant of like tenor.

1.6 Repurchase on Sale, Merger, or Consolidation of the Company.

1.6.1 "***Acquisition*.**" For the purpose of this warrant, "Acquisition" means (a) any sale, exclusive license, or other disposition of all or substantially all of the assets (including intellectual property) of the Company, or (b) any reorganization, consolidation, merger or sale of the voting securities of the Company or any other transaction where the holders of the Company' s securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction; provided, however, that an Acquisition shall not be deemed to occur as a result of a financing transaction in which newly issued securities of the Company are issued to investors.

1.6.2 Assumption of Warrant. If upon the closing of any Acquisition the successor entity assumes the obligations of this warrant, then this warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing. The Warrant Price shall be adjusted accordingly. The Company shall use reasonable efforts to cause the surviving corporation to assume the obligations of this warrant.

1.6.3 Nonassumption. If upon the closing of any Acquisition in which the consideration consists entirely of cash and/or unrestricted securities, the successor entity does not assume the obligations of this warrant and Holder has not otherwise exercised this warrant in full, then this warrant shall be automatically converted pursuant to Section 1.2 and thereafter Holder shall participate in the Acquisition on the same terms as other holders of the same class of securities of the Company. If the consideration is property other than cash and/or unrestricted securities, the successor entity shall assume this warrant or, at the election of the Company, the Company may purchase this warrant for cash upon the closing of the Acquisition for an amount per Share equal to 1.50 times the Warrant Price.

1.7 Adjustment to Class of Shares; Number of Shares; Warrant Price; Adjustments Cumulative. In the event of (I) a preferred stock equity financing by the Company after the Issue Date the gross proceeds of which equal at least Five Million Dollars ($5,000,000), other than the sale and issuance by the Company of shares of its Series F Preferred Stock, or (II) an initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the "***IPO***") (either such financing, the "***Next***

Round"), if the price per share (the "***Next Round Price***"; provided that in the case of an IPO, the Next Round Price shall be the lesser of the price per share of common stock sold in connection with the IPO or the price per share of the Company' s common stock on the close of trading on the fifth day following the IPO) of the shares sold in such Next Round (the "***Next Round Stock***") is less than the Warrant Price, Holder shall have the right, in Holder' s sole discretion, to elect to treat this Warrant as exercisable for Shares of the Next Round Stock at the lower of the Warrant Price or the Next Round Price (with the number of such shares subject of this Warrant automatically adjusted to equal (i) the aggregate Number of Shares for which this Warrant is then exercisable (as adjusted hereunder, but before giving effect to this Section 1.7) multiplied by (ii) (q) the Warrant Price or (r) if the Next Round Price is lower than the Warrant Price, the quotient of (x) the Warrant Price divided by (y) the Next Round Price) (the "***Next Round Election***"). Company shall provide Holder no less than fifteen (15) Business Days' written notice prior to any sale of Next Round Stock (the "***Next Round Notice***"). Holder shall make the Next Round Election by providing the Company with written notice within ten (10) Business Days' of its receipt of the Next Round Notice. If Holder makes the Next Round Election, then (a) the Next Round Election shall be effective immediately following the initial closing of the Next Round and (b) the Shares for which this Warrant is exercisable shall bear the same rights, preferences, and privileges of such Next Round Stock. The right of Holder to make a Next Round Election (and the corresponding adjustment provided for in this Section 1.7) shall (i) only apply to the first Next Round that occurs after the Issue Date and shall not apply to any other financing, except to the extent the first Next Round is a preferred stock financing and is followed, within one (1) year thereof, by an IPO, in which case Holder' s right to make the Next Round Election shall survive through such second Next Round; and (ii) terminate, in the case of the occurrence of an Acquisition, upon the satisfaction of the provisions of Section 1.6 hereof. Any adjustment to the Class of Shares, Number of Shares and/or Warrant Price made as a result of this Article 1.7 shall be in addition to any adjustment(s) to be made in accordance with Article 2 hereof.

ARTICLE 2

ADJUSTMENTS TO THE SHARES

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on its common stock payable in common stock, or other securities, or subdivides the outstanding common stock into a greater amount of common stock, then upon exercise of this warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend or subdivision occurred.

2.2 Reclassification, Exchange or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this warrant, Holder shall be entitled to receive, upon exercise or conversion of this warrant, the number and kind of securities and property that Holder would have received for the Shares if this warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the

Company' s Certificate of Incorporation upon the closing of a registered public offering of the Company' s common stock. The Company or its successor shall promptly issue to Holder a new warrant for such new securities or other property. The new warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Combinations, Etc. If the outstanding Shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased. If the outstanding Shares are split or multiplied, by reclassification or otherwise, into a greater number of shares, the Warrant Price shall be proportionately decreased.

2.4 Adjustments for Diluting Issuances. In the event of the issuance (a "***Diluting Issuance***") by the Company after the Issue Date of securities at a price per share less than the Warrant Price, then the number of shares of common stock issuable upon conversion of the Shares shall be adjusted in accordance with those applicable provisions of the Company' s Certificate of Incorporation, as amended, that apply to Diluting Issuances (including any exceptions, exclusions or waivers to an adjustment to the conversion price of the class and series of stock for which the warrant is exercisable).

2.5 No Impairment. The Company shall not, by amendment of its Certificate of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this warrant by the Company, but shall at all times in good faith assist in carrying out all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder' s rights under this Article against impairment.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, the Company at its expense shall promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

2.7 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of the Warrant and the Number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value of a full Share (as determined in accordance with Section 1.3).

ARTICLE 3

REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this warrant is equal to the price per share paid in the Company' s most recent equity financing.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

(c) The Company' s capitalization table attached to this warrant is true and complete as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to effect any reclassification or recapitalization of common stock; or (c) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up, then, in connection with each such event, the Company shall give Holder (1) at least 10 days prior written notice of the date on which a record will be taken for such dividend or distribution (and specifying the date on which the holders of common stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a); and (2) in the case of the matters referred to in (b) and (c) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event).

3.3 Information Rights. So long as the Holder holds this warrant, the Company shall deliver to the Holder (a) promptly after mailing, copies of all communiques to the shareholders of the Company, (b) within one hundred eighty (180) days after the end of each fiscal year of the Company, the annual audited financial statements of the Company certified by independent public accountants of recognized standing and (c) within forty-five (45) days after the end of each of the first three quarters of each fiscal year, the Company' s quarterly, unaudited financial statements. Subsequent to the exercise of the warrant, Holder shall have those information rights as set forth in Section 4.1 of the Investor Rights Agreement (as hereinafter defined) as applicable to Investors (as defined therein). The Company' s obligations and Holder' s rights contained in this Section 3.3 shall terminate immediately prior to the effective date of the registration statement pertaining to the Company' s first firm commitment underwritten public offering of its Common Stock under the Securities Act.

3.4 Market Stand-off Agreement. The Holder agrees that the Shares shall be subject to the Market Stand-Off provisions in Section 2.13 of the Second Amended and Restated Investor Rights Agreement among the Company and certain other persons dated as of August 2, 2006.

3.5 Holder Representations and Agreements. In connection with the issuance of this warrant and the Shares (the "***Securities***"), Holder makes the following representations to the Company:

(a) Holder is aware of the Company' s business affairs and financial condition, and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Holder is purchasing the Securities for its own account for investment purposes only, not as a nominee or agent, and not with a view towards, or for resale in connection with, any "distribution" thereof for purposes of the Securities Act of 1933, as amended (the "***Securities Act***"). Holder has such knowledge and experience in financial business matters and the undersigned is capable of evaluating the merits and risks of the purchase of the Securities and of protecting its interests in connection therewith.

(b) Holder understands that the Securities have not been registered under the Securities Act or any applicable state securities laws in reliance upon specific exemptions therefrom, which exemptions depend upon, among other things, the bona fide nature of the undersigned' s investment intent as expressed herein.

(c) Holder further understands that the Securities must be held indefinitely, and the undersigned must therefore bear the economic risk therewith, unless the Securities are subsequently registered under the Securities Act and applicable state securities laws or unless an exemption from such registration is otherwise available.

(d) Holder is familiar with the provisions of Rule 144, promulgated pursuant to the Securities Act, which, in substance, permits limited public resale of "restricted securities" acquired, directly or indirectly, from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions.

(e) The Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires, among other things, the existence of a public market for the Securities, the availability of certain current public information about the Company, the resale occurring not less than the period of time specified in Rule 144 after a party has purchased and paid for the security to be sold, the sales being affected through a "broker' s transaction" or in transactions directly with a "market maker" and the number of securities being sold during any three month period not exceeding specified limitations.

(f) The undersigned further understands that in the event that all of the applicable requirements of Rule 144 are not satisfied, registration under the Securities Act or an available exception from registration will be required.

(g) Holder is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

ARTICLE 4

MISCELLANEOUS

4.1 Term: Exercise Upon Expiration. This warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above; provided, however, that if the Company completes its initial public offering within the one-year period immediately prior to the Expiration Date, the Expiration Date shall automatically be extended until 185 days after the effective date of the Company' s initial public offering. If this warrant has not been exercised prior to the Expiration Date, this warrant shall be deemed to have been automatically exercised on the Expiration Date by "cashless" conversion pursuant to Section 1.2.

4.2 Legends. This warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW.

4.3 Compliance with Securities Laws on Transfer. This warrant and the Shares issuable upon exercise of this warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee.

4.4 Transfer Procedure. Subject to the provisions of Section 4.3, Holder may transfer all or part of this warrant or the Shares issuable upon exercise of this warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) by giving the Company notice of the portion of the warrant being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this warrant to the Company for reissuance to the transferee(s) (and Holder, if applicable).

4.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or the Holder, as the case may be, in writing by the Company or such Holder from time to time. All notices to the Holder shall be addressed as follows:

Square 1 Bank
Attn: Warrant Administrator
406 Blackwell Street, Suite 240
Durham, NC 27701

4.6 Amendments. This warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

4.7 Attorney' s Fees. In the event of any dispute between the parties concerning the terms and provisions of this warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorney' s fees.

4.8 Governing Law. This warrant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to its principals regarding conflicts of law.

LIPOSCIENCE, INC.

By: /s/ Lucy G. Martindale
Name: Lucy G. Martindale
Title: Executive Vice President & Chief Financial Officer

[*Signature Page to Warrant to Purchase Stock*]

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned hereby elects to purchase shares of the stock of LIPOSCIENCE, INC. pursuant to the terms of the attached warrant, and tenders herewith payment of the purchase price of such shares in full.

2. The undersigned hereby elects to convert the attached warrant into shares in the manner specified in the warrant. This conversion is exercised with respect to of the shares covered by the warrant.

[Strike paragraph that does not apply.]

3. Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below:

Square 1 Bank
Attn: Warrant Administrator
406 Blackwell Street, Suite 240
Durham, NC 27701

4. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

SQUARE 1 BANK or Registered Assignee

_____

(Signature)

_____

(Date)

Exhibit 10.3.1

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN SECTIONS 5.3 AND 5.4 BELOW, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

WARRANT TO PURCHASE STOCK NO. 1

Company:	LIPOSCIENCE, INC., a Delaware corporation
Number of Shares:	22,989 (Subject to Section 1.7)
Type/	Series E Convertible Preferred (Subject to Section 1.7)
Series of Stock:	$4.35 per share (Subject to Section 1.7)
Warrant Price:	December 20, 2012
Issue Date:	December 20, 2022 (See also Section 5.1(b))
Expiration Date:	This Warrant to Purchase Stock ("**Warrant**") is issued in connection with that certain Loan and Security
Credit Facility:	Agreement of even date herewith among Oxford Finance LLC, as Lender and Collateral Agent, the Lenders from time to time party thereto, including Square 1 Bank and the Company (as modified, amended and/or restated from time to time, the "**Loan Agreement**").F

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, OXFORD FINANCE LLC ("**Oxford**" and, together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, "**Holder**") is entitled to purchase the number of fully paid and non-assessable shares (the "**Shares**") of the above-stated Type/Series of Stock (the "**Class**") of the above-named company (the "**Company**") at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to the Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, the Company shall issue to the Holder such number of fully paid and non assessable Shares as are computed using the following formula:

$$X = Y(A-B)/A$$

where:

X= the number of Shares to be issued to the Holder;

Y= the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to the Company in payment of the aggregate Warrant Price);

A= the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B= the Warrant Price.

1.3 Fair Market Value. If the Company' s common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a **"Trading Market")** and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company' s common stock is then traded in a Trading Market and the Class is a series of the Company' s convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company' s common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company' s common stock into which a Share is then convertible. If the Company' s common stock is not traded in a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender of this Warrant to the Company for cancellation, the Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) Acquisition. For the purpose of this Warrant, **"Acquisition"** means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of the Company (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company' s domicile), or any other corporate reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company' s (or the surviving or successor entity' s) outstanding voting power immediately after such merger, consolidation or reorganization (or, if such Company stockholders beneficially own a majority of the outstanding voting power of the surviving or successor entity as of immediately after such merger, consolidation or reorganization, such surviving or successor entity is not the Company); or (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company' s then-total outstanding combined voting power.

(b) Treatment of Warrant at Acquisition. In the event of an Acquisition in which the consideration to be received by the Company' s stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a **"Cash/Public Acquisition"),** either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or 1.2 and such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) The Company shall provide Holder with written notice of its request relating to the Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such contemplated Cash/Public Acquisition giving rise to such notice), which is to be delivered to Holder not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. In the event the Company does not provide such notice, then if, immediately prior to the Cash/Public Acquisition, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date,

then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon such exercise to the Holder and Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

(e) As used in this Warrant, "**Marketable Securities**" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in Trading Market, and (iii) Holder would be able to publicly re-sell, within six (6) months following the closing of such Acquisition, all of the issuer' s shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise this Warrant in full on or prior to the closing of such Acquisition.

1.7 Adjustment to Class of Shares; Number of Shares; Warrant Price; Adjustments Cumulative. In the event of (I) a preferred stock equity financing by the Company after the Issue Date the gross proceeds of which equal at least Five Million Dollars ($5,000,000), other than the sale and issuance by the Company of shares of its Series F Preferred Stock, or (II) an IPO (as defined below) (either such financing, the "**Next Round**"), if the price per share (the "**Next Round Price**"**;** provided that in the case of an IPO, the Next Round Price shall be the lesser of the price per share of common stock sold in connection with the IPO or the price per share of the Company' s common stock on the close of trading on the fifth day following the IPO) of the shares sold in such Next Round (the "**Next Round Stock**") is less than the Warrant Price, Holder shall have the right, in Holder' s sole discretion, to elect to treat this Warrant as exercisable for Shares of the Next Round Stock at the lower of the Warrant Price or the Next Round Price (with the number of such shares subject of this Warrant automatically adjusted to equal (i) the aggregate Number of Shares for which this Warrant is then exercisable (as adjusted hereunder, but before giving effect to this Section 1.7) multiplied by (ii) (q) the Warrant Price or (r) if the Next Round Price is lower than the Warrant Price, the quotient of (x) the Warrant Price divided by (y) the Next Round Price) (the "**Next Round Election**"). Company shall provide Holder no less than fifteen (15) Business Days' written notice prior to any sale of Next Round Stock (the "**Next Round Notice**"). Holder shall make the Next Round Election by providing the Company with written notice within ten (10) Business Days' of its receipt of the Next Round Notice. If Holder makes the Next Round Election, then (a) the Next Round Election shall be effective immediately following the initial closing of the Next Round and (b) the Shares for which this Warrant is exercisable shall bear the same rights, preferences, and privileges of such Next Round Stock. The right of Holder to make a Next Round Election (and the corresponding adjustment provided for in this Section 1.7) shall (i) only apply to the first Next Round that occurs after the Issue Date and shall not apply to any other financing, except to the extent the first Next Round is a preferred stock financing and is followed, within one (1) year thereof, by an IPO, in which case Holder' s right to make the Next Round Election shall survive through such second Next Round; and (ii) terminate, in the case of the occurrence of an Acquisition, upon the satisfaction of the provisions of Section 1.6 hereof. Any adjustment to the Class of Shares, Number of Shares and/or Warrant Price made as a result of this Article 1.7 shall be in addition to any adjustment(s) to be made in accordance with Article 2 hereof.

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend or distribution on the outstanding shares of the Class payable in common stock or other securities or property (other than cash), then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities and property which Holder would have received had Holder owned the

Shares of record as of the date the dividend or distribution occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations substitutions, replacements or other similar events.

2.3 Conversion of Preferred Stock. If the Class is a class and series of the Company' s convertible preferred stock, in the event that all outstanding shares of the Class are converted, automatically or by action of the holders thereof, into common stock pursuant to the provisions of the Company' s Certificate of Incorporation, including, without limitation, in connection with the Company' s initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the "**IPO**"**),** then from and after the date on which all outstanding shares of the Class have been so converted, this Warrant shall be exercisable for such number of shares of common stock into which the Shares would have been converted had the Shares been outstanding on the date of such conversion, and the Warrant Price shall equal the Warrant Price in effect as of immediately prior to such conversion divided by the number of shares of common stock into which one Share would have been converted, all subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant.

2.4 Adjustments for Diluting Issuances. Without duplication of any adjustment otherwise provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment from time to time in the manner set forth in the Company' s Articles or Certificate of Incorporation as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.5 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of the Warrant, the Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (i) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (ii) the then-effective Warrant Price.

2.6 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company, at the Company' s expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

SECTION 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class were last sold and issued prior to the Issue Date hereof in an arms-length transaction in which at least $500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. The Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of the Class, common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and the conversion of the Shares into common stock or such other securities.

(c) The Company' s capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company' s stock (other than pursuant to contractual pre-emptive rights);

(c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class;

(d) effect an Acquisition or to liquidate, dissolve or wind up; or

(e) effect an IPO;

then, in connection with each such event, the Company shall give Holder:

(1) at least seven (7) Business Days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above; and

(2) in the case of the matters referred to in (c) and (d) above at least seven (7) Business Days prior written notice of the date when the same will take place (and specifying the date on which the holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event).

Reference is made to Section 1.6(c) whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if the Company does not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder' s accounting or reporting requirements.

SECTION 4. REPRESENTATIONS, WARRANTIES OF THE HOLDER.

The Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder' s account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of the Company' s business affairs and financial condition and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder' s investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder' s investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Stand-off Agreement. Holder agrees that the Shares shall be subject to the Market Standoff provisions in Section 2.13 of the Second Amended and Restated Investor Rights Agreement among the Company and other persons dated as of August 2,2006.

4.7 No Voting Rights. Holder, as a Holder of this Warrant, will not have any voting rights until the exercise of this Warrant.

SECTION 5. MISCELLANEOUS.

5.1 Term; Automatic Cashless Exercise Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Eastern time, on the Expiration Date and shall be void thereafter; provided, however, that if the Company completes its IPO within the one-year period immediately prior to the Expiration Date, the Expiration Date shall automatically be extended until 185 days after the effective date of the Company' s IPO.

(b) Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. Each certificate evidencing Shares (and each certificate evidencing the securities issued upon conversion of any Shares, if any) shall be imprinted with a legend in substantially the following form:

THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO OXFORD FINANCE LLC DATED DECEMBER 20, 2012, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issued upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part except in compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder, provided that any such transferee is an "accredited investor" as defined in Regulation D promulgated under the Act. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Transfer Procedure. After receipt by Oxford of the executed Warrant, Oxford may transfer all or part of this Warrant to one or more of Oxford' s affiliates (each, an "**Oxford Affiliate**"), by execution of an Assignment substantially in the form of Appendix 2. Subject to the provisions of Article 5.3 and upon providing the Company with written notice, Oxford, any such Oxford Affiliate and any subsequent Holder, may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any other transferee, provided, however, in connection with any such transfer, the Oxford Affiliate(s) or any subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). Notwithstanding any contrary provision herein, at all times prior to the IPO, Holder may not, without the Company' s prior written consent, transfer this Warrant or any portion hereof, or any Shares issued upon any exercise hereof, or any shares or other securities issued upon any conversion of any Shares issued upon any exercise hereof, to any person or entity who directly competes with the Company, except in connection with an Acquisition of the Company by such a direct competitor.

5.5 Notices. All notices and other communications hereunder from the Company to the Holder, or vice versa, shall be deemed delivered and effective (i) when given personally, (ii) on the third (3rd) Business Day after being mailed by first-class registered or certified mail, postage prepaid, (iii) upon actual receipt if given by facsimile or electronic mail and such receipt is confirmed in writing by the recipient, or (iv) on the first Business Day following delivery to a reliable overnight courier service, courier fee prepaid, in any case at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time in accordance with the provisions of this Section 5.5. All notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

Oxford Finance LLC
133 N. Fairfax Street
Alexandria, VA 22314
Attn: Legal Department
Telephone: (703) 519-4900
Facsimile: (703) 519-5225
Email: LegalDepartment@oxfordfinance.com

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

LIPOSCIENCE, INC.
2500 Sumner Boulevard
Raleigh, NC 27616
Attn: Chief Financial Officer
Fax: (919)872-5927
Email: lmartindale@liposcience.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to its principles regarding conflicts of law.

5.10 Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

5.11 Business Days. "**Business Day**" is any day that is not a Saturday, Sunday or a day on which Square 1 Bank is closed.

[Remainder of page left blank intentionally]

[Signature page follows]

IN WITNESS WHEREOF, the parties have caused this Warrant to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

"COMPANY"

LIPOSCIENCE, INC.

By: /s/ Lucy G. Martindale
Name: Lucy G. Martindale
(Print)
Title: Executive Vice President & Chief Financial Officer

"HOLDER"

OXFORD FINANCE LLC

By: /s/ Mark Davis
Name: Mark Davis
(Print)
Title: Vice President - Finance, Secretary & Treasurer

[***Signature Page to Warrant to Purchase Stock–Term Note No. 1***]

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right purchase shares of the Common/Series Preferred [circle one] Stock of LIPOSCIENCE, INC. (the "**Company**") in accordance with the attached Warrant To Purchase Stock, and tenders payment of the aggregate Warrant Price for such shares as follows:

☐ check in the amount of $ payable to order of the Company enclosed herewith

☐ Wire transfer of immediately available funds to the Company' s account

☐ Cashless Exercise pursuant to Section 1.2 of the Warrant

☐ Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

_____

Holder' s Name

_____

_____

(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties in Section 4 of the Warrant to Purchase Stock as of the date hereof.

HOLDER:

_____

By: _____

Name: _____

Title: _____

Date: _____

APPENDIX 2

ASSIGNMENT

For value received, Oxford Finance LLC hereby sells, assigns and transfers unto

Name: [OXFORD TRANSFEREE]

Address: _____

Tax ID: _____

that certain Warrant to Purchase Stock issued by LIPOSCIENCE, INC. (the "**Company**"**),** on December 20, 2012 (the "**Warrant**"**)** together with all rights, title and interest therein.

OXFORD FINANCE LLC

By: _____

Name: _____

Title: _____

Date: _____

By its execution below, and for the benefit of the Company, [OXFORD TRANSFEREE] makes each of the representations and warranties set forth in Article 4 of the Warrant and agrees to all other provisions of the Warrant as of the date hereof.

[OXFORD TRANSFEREE]

By: _____

Name: _____

Title: _____

Exhibit 10.3.2

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN SECTIONS 5.3 AND 5.4 BELOW, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

WARRANT TO PURCHASE STOCK NO. 2

Company:	LIPOSCIENCE, INC., a Delaware corporation
Number of Shares:	22,989 (Subject to Section 1.7)
Type/ Series of Stock:	Series E Convertible Preferred (Subject to Section 1.7)
Warrant Price:	$4.35 per share (Subject to Section 1.7)
Issue Date:	December 20, 2012
Expiration Date:	December 20, 2022 (See also Section 5.1(b))
Credit Facility:	This Warrant to Purchase Stock ("**Warrant**") is issued in connection with that certain Loan and Security Agreement of even date herewith among Oxford Finance LLC, as Lender and Collateral Agent, the Lenders from time to time party thereto, including Square 1 Bank and the Company (as modified, amended and/or restated from time to time, the "**Loan Agreement**").

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, OXFORD FINANCE LLC ("**Oxford**" and, together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, "**Holder**") is entitled to purchase the number of fully paid and non-assessable shares (the "**Shares**") of the above-stated Type/Series of Stock (the "**Class**") of the above-named company (the "**Company**") at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to the Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, the Company shall issue to the Holder such number of fully paid and non-assessable Shares as are computed using the following formula:

X = Y(A-B)/A

where:

X = the number of Shares to be issued to the Holder;

Y = the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to the Company in payment of the aggregate Warrant Price);

A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B = the Warrant Price.

1.3 Fair Market Value. If the Company' s common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "**Trading Market**") and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price

of a share of common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company' s common stock is then traded in a Trading Market and the Class is a series of the Company' s convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company' s common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company' s common stock into which a Share is then convertible. If the Company' s common stock is not traded in a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender of this Warrant to the Company for cancellation, the Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) Acquisition. For the purpose of this Warrant, "**Acquisition**" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of the Company (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company' s domicile), or any other corporate reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company' s (or the surviving or successor entity' s) outstanding voting power immediately after such merger, consolidation or reorganization (or, if such Company stockholders beneficially own a majority of the outstanding voting power of the surviving or successor entity as of immediately after such merger, consolidation or reorganization, such surviving or successor entity is not the Company); or (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company' s then-total outstanding combined voting power.

(b) Treatment of Warrant at Acquisition. In the event of an Acquisition in which the consideration to be received by the Company' s stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a "**Cash/Public Acquisition**"), either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or 1.2 and such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) The Company shall provide Holder with written notice of its request relating to the Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such contemplated Cash/Public Acquisition giving rise to such notice), which is to be delivered to Holder not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. In the event the Company does not provide such notice, then if, immediately prior to the Cash/Public Acquisition, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon such exercise to the Holder and Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

(e) As used in this Warrant, "**Marketable Securities**" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in Trading Market, and (iii) Holder would be able to publicly re-sell, within six (6) months following the closing of such Acquisition, all of the issuer' s shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise this Warrant in full on or prior to the closing of such Acquisition.

1.7 Adjustment to Class of Shares; Number of Shares; Warrant Price; Adjustments Cumulative. In the event of (I) a preferred stock equity financing by the Company after the Issue Date the gross proceeds of which equal at least Five Million Dollars ($5,000,000), other than the sale and issuance by the Company of shares of its Series F Preferred Stock, or (II) an IPO (as defined below) (either such financing, the "**Next Round**"), if the price per share (the "**Next Round Price**"; provided that in the case of an IPO, the Next Round Price shall be the lesser of the price per share of common stock sold in connection with the IPO or the price per share of the Company' s common stock on the close of trading on the fifth day following the IPO) of the shares sold in such Next Round (the "**Next Round Stock**") is less than the Warrant Price, Holder shall have the right, in Holder' s sole discretion, to elect to treat this Warrant as exercisable for Shares of the Next Round Stock at the lower of the Warrant Price or the Next Round Price (with the number of such shares subject of this Warrant automatically adjusted to equal (i) the aggregate Number of Shares for which this Warrant is then exercisable (as adjusted hereunder, but before giving effect to this Section 1.7) multiplied by (ii) (q) the Warrant Price or (r) if the Next Round Price is lower than the Warrant Price, the quotient of (x) the Warrant Price divided by (y) the Next Round Price) (the "**Next Round Election**"). Company shall provide Holder no less than fifteen (15) Business Days' written notice prior to any sale of Next Round Stock (the "**Next Round Notice**"). Holder shall make the Next Round Election by providing the Company with written notice within ten (10) Business Days' of its receipt of the Next Round Notice. If Holder makes the Next Round Election, then (a) the Next Round Election shall be effective immediately following the initial closing of the Next Round and (b) the Shares for which this Warrant is exercisable shall bear the same rights, preferences, and privileges of such Next Round Stock. The right of Holder to make a Next Round Election (and the corresponding adjustment provided for in this Section 1.7) shall (i) only apply to the first Next Round that occurs after the Issue Date and shall not apply to any other financing, except to the extent the first Next Round is a preferred stock financing and is followed, within one (1) year thereof, by an IPO, in which case Holder' s right to make the Next Round Election shall survive through such second Next Round; and (ii) terminate, in the case of the occurrence of an Acquisition, upon the satisfaction of the provisions of Section 1.6 hereof. Any adjustment to the Class of Shares, Number of Shares and/or Warrant Price made as a result of this Article 1.7 shall be in addition to any adjustment(s) to be made in accordance with Article 2 hereof.

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend or distribution on the outstanding shares of the Class payable in common stock or other securities or property (other than cash), then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities and property which Holder would have received had Holder owned the Shares of record as of the date the dividend or distribution occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations substitutions, replacements or other similar events.

2.3 Conversion of Preferred Stock. If the Class is a class and series of the Company' s convertible preferred stock, in the event that all outstanding shares of the Class are converted, automatically or by action of the holders thereof, into common stock pursuant to the provisions of the Company' s Certificate of Incorporation, including, without limitation, in connection with the Company' s initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the "**IPO**"), then from and after the date on which all outstanding shares of the Class have been so converted, this Warrant shall be exercisable for such number of shares of common stock into which the Shares would have been converted had the Shares been outstanding on the date of such conversion, and the Warrant Price shall equal the Warrant Price in effect as of immediately prior to such conversion divided by the number of shares of common stock into which one Share would have been converted, all subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant.

2.4 Adjustments for Diluting Issuances. Without duplication of any adjustment otherwise provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment from time to time in the manner set forth in the Company' s Articles or Certificate of Incorporation as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.5 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of the Warrant, the Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (i) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (ii) the then-effective Warrant Price.

2.6 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company, at the Company' s expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

SECTION 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class were last sold and issued prior to the Issue Date hereof in an arms-length transaction in which at least $500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. The Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of the Class, common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and the conversion of the Shares into common stock or such other securities.

(c) The Company' s capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company' s stock (other than pursuant to contractual pre-emptive rights);

(c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class;

(d) effect an Acquisition or to liquidate, dissolve or wind up; or

(e) effect an IPO;

then, in connection with each such event, the Company shall give Holder:

(1) at least seven (7) Business Days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above; and

(2) in the case of the matters referred to in (c) and (d) above at least seven (7) Business Days prior written notice of the date when the same will take place (and specifying the date on which the holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event).

Reference is made to Section 1.6(c) whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if the Company does not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder' s accounting or reporting requirements.

SECTION 4. REPRESENTATIONS, WARRANTIES OF THE HOLDER.

The Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder' s account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of the Company' s business affairs and financial condition and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder' s investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder' s investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Stand-off Agreement. Holder agrees that the Shares shall be subject to the Market Standoff provisions in Section 2.13 of the Second Amended and Restated Investor Rights Agreement among the Company and other persons dated as of August 2, 2006.

4.7 No Voting Rights. Holder, as a Holder of this Warrant, will not have any voting rights until the exercise of this Warrant.

SECTION 5. MISCELLANEOUS.

5.1 Term; Automatic Cashless Exercise Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Eastern time, on the Expiration Date and shall be void thereafter; provided, however, that if the Company completes its IPO within the one-year period immediately prior to the Expiration Date, the Expiration Date shall automatically be extended until 185 days after the effective date of the Company' s IPO.

(b) Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. Each certificate evidencing Shares (and each certificate evidencing the securities issued upon conversion of any Shares, if any) shall be imprinted with a legend in substantially the following form:

> THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO OXFORD FINANCE LLC DATED DECEMBER 20, 2012, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issued upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part except in compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder, provided that any such transferee is an "accredited investor" as defined in Regulation D promulgated under the Act. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Transfer Procedure. After receipt by Oxford of the executed Warrant, Oxford may transfer all or part of this Warrant to one or more of Oxford' s affiliates (each, an "**Oxford Affiliate**"), by execution of an Assignment substantially in the form of Appendix 2. Subject to the provisions of Article 5.3 and upon providing the Company with written notice, Oxford, any such Oxford Affiliate and any subsequent Holder, may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any other transferee, provided, however, in connection with any such transfer, the Oxford Affiliate(s) or any subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). Notwithstanding any contrary provision herein, at all times prior to the IPO, Holder may not, without the Company' s prior written consent, transfer this Warrant or any portion hereof, or any Shares issued upon any exercise hereof, or any shares or other securities issued upon any conversion of any Shares issued upon any exercise hereof, to any person or entity who directly competes with the Company, except in connection with an Acquisition of the Company by such a direct competitor.

5.5 Notices. All notices and other communications hereunder from the Company to the Holder, or vice versa, shall be deemed delivered and effective (i) when given personally, (ii) on the third (3rd) Business Day after being mailed by first-class registered or certified mail, postage prepaid, (iii) upon actual receipt if given by facsimile or electronic mail and such receipt is confirmed in writing by the recipient, or (iv) on the first Business Day following delivery to a reliable overnight courier service, courier fee prepaid, in any case at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time in accordance with the provisions of this Section 5.5. All notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

Oxford Finance LLC
133 N. Fairfax Street
Alexandria, VA 22314
Attn: Legal Department
Telephone: (703) 519-4900
Facsimile: (703) 519-5225
Email: LegalDepartment@oxfordfinance.com

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

LIPOSCIENCE, INC.
2500 Sumner Boulevard
Raleigh, NC 27616
Attn: Chief Financial Officer
Fax: (919) 872-5927
Email: lmartindale@liposcience.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to its principles regarding conflicts of law.

5.10 Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

5.11 Business Days. "**Business Day**" is any day that is not a Saturday, Sunday or a day on which Square 1 Bank is closed.

[Remainder of page left blank intentionally]

[Signature page follows]

IN WITNESS WHEREOF, the parties have caused this Warrant to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

"COMPANY"

LIPOSCIENCE, INC.

By: /s/ Lucy G. Martindale
Name: Lucy G. Martindale
(Print)
Title: Executive Vice President and Chief Financial Officer

"HOLDER"

OXFORD FINANCE LLC

By: /s/ Mark Davis
Name: Mark Davis
(Print)
Title: Vice President - Finance, Secretary & Treasurer

[*Signature Page to Warrant to Purchase Stock–Term Note No. 2*]

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right purchase shares of the Common/Series Preferred [circle one] Stock of LIPOSCIENCE, INC. (the "**Company**") in accordance with the attached Warrant To Purchase Stock, and tenders payment of the aggregate Warrant Price for such shares as follows:

☐ check in the amount of $ payable to order of the Company enclosed herewith

☐ Wire transfer of immediately available funds to the Company' s account

☐ Cashless Exercise pursuant to Section 1.2 of the Warrant

☐ Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

_____

Holder' s Name

_____

_____

(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties in Section 4 of the Warrant to Purchase Stock as of the date hereof.

HOLDER:

_____

By: _____

Name: _____

Title: _____

Date: _____

APPENDIX 2

ASSIGNMENT

For value received, Oxford Finance LLC hereby sells, assigns and transfers unto

Name: [OXFORD TRANSFEREE]

Address: _____

Tax ID: _____

that certain Warrant to Purchase Stock issued by LIPOSCIENCE, INC. (the "**Company**"**)**, on December 20, 2012 (the "**Warrant**"**)** together with all rights, title and interest therein.

OXFORD FINANCE LLC

By: _____

Name: _____

Title: _____

Date: _____

By its execution below, and for the benefit of the Company, [OXFORD TRANSFEREE] makes each of the representations and warranties set forth in Article 4 of the Warrant and agrees to all other provisions of the Warrant as of the date hereof.

[OXFORD TRANSFEREE]

By: _____

Name: _____

Title: _____

Exhibit 10.32

EMPLOYMENT AGREEMENT

This **EMPLOYMENT AGREEMENT** (this "***Agreement***") is entered into on , 2013, (the "***Effective Date***"), by and between **ROBERT M. HONIGBERG, M.D.** ("***Employee***") and **LIPOSCIENCE, INC.** (the "***Company***"). This Agreement supersedes and replaces in its entirety all prior offer letters, employment agreements and severance benefits rights agreements between the Company and Employee (collectively, the "***Prior Agreements***"), including but not limited to the offer letter agreement dated September 24, 2011. However, this Agreement does not in any way replace or supersede the Confidentiality, Inventions and Non-Competition Agreement between the Company and the Employee dated September 24, 2011, which remains in full force and effect (the "***Proprietary Agreement***").

1. EMPLOYMENT BY THE COMPANY.

(a) At-Will Employment. Employee is employed by the Company on an "at will" basis, meaning either the Company or Employee may terminate Employee' s employment at any time, with or without cause or advanced notice. Any contrary representations that may have been made to Employee are superseded by this Agreement. This Agreement constitutes the full and complete agreement between Employee and the Company on the "at will" nature of Employee' s employment with the Company, which may be changed only in an express written agreement signed by Employee and a non-employee member of the Company' s Board of Directors (the "***Board***").

(b) Position & Duties. Employee is currently serving as the Chief Medical Officer, Vice President, Medical Affairs of the Company. In this position, Employee reports to the Company' s Chief Executive Officer and performs duties consistent with his position, as adjusted from time to time. The Company expects Employee to perform his duties principally out of the Company' s corporate headquarters, currently in Raleigh, North Carolina, with travel as reasonably necessary to perform his duties. During his employment with the Company, Employee will devote his best efforts and substantially all of his business time and attention to the business of the Company.

(c) Company Policies. Employee is subject to the Company' s personnel and compliance policies and procedures, including but not limited to expense reimbursement policies, as such policies and procedures may be interpreted, adopted, revised, or terminated from time to time in the Company' s sole discretion. Employee agrees to abide by all applicable policies of the Company, as in effect from time to time.

(d) No Conflicts. Employee represents that Employee' s performance of all the terms of this Agreement and his service as an employee of the Company do not and will not breach any agreement or obligation of any kind, including agreements or obligations Employee may have with prior employers or entities for which Employee has provided services. Employee has not entered into, and Employee agrees that Employee will not enter into, any agreement or obligation, either written or oral, in conflict with this Agreement.

2. COMPENSATION.

(a) Salary. Employee' s current annual base salary is $289,500 (as adjusted from time to time, "***Base Salary***"). The Base Salary is subject to applicable withholdings and deductions, and is payable on the Company' s standard payroll cycle. The Base Salary is subject to review and adjustment from time to time, as determined by the Board or a duly authorized committee of the Board.

(b) Bonus. Employee is currently eligible to earn an annual cash bonus under the Company' s annual Performance Bonus Plan for Strategic Leadership Team members (the "***SLT Plan***"), with the target amount of such bonus equal to 36% of Employee' s Base Salary. The Board or the Committee may amend the SLT Plan from time to time. To be eligible to earn any bonus under the SLT Plan, Employee must remain an employee in good standing through the end of the applicable performance period. Whether or not Employee earns any bonus and the amount of any earned bonus will be determined by the Board or the Compensation Committee (the "***Committee***") of the Board, in its sole discretion. Any earned bonus is subject to applicable withholdings and deductions, and is payable no later than March 15th of the year following the year for which it is no longer subject to a substantial risk of forfeiture.

(c) Commuting Expenses. The Company will reimburse Employee for reasonable out-of-pocket expenses incurred by Employee in connection with his commute to Raleigh, North Carolina from Mequon, Wisconsin, prior to Employee' s relocation to Raleigh, North Carolina, up to $8,000 per month. Reasonable expenses may include coach class airfare, ground transportation and lodging for Employee. The Company will not reimburse ordinary course meals and entertainment-related expenses. Employee' s right to reimbursement is subject to timely submission of appropriate documentary evidence of the expenses incurred in accordance with the Company' s standard expense reimbursement policies. The Company will withhold from any reimbursements the applicable income and employment tax withholdings, as Employee will be responsible for paying any taxes on these reimbursements to the extent that they are taxable under applicable law. If required for compliance with Section 409A of the Internal Revenue Code of 1986, as amended, any expenses incurred by Employee that are reimbursed by the Company as non-taxable reimbursement under this Agreement will be paid in accordance with Treasury Regulations Section 1.409A-3(i)(1)(iv) and in accordance with the Company' s standard expense reimbursement policies, but in any event on or before the last day of Employee' s taxable year following the taxable year in which Employee incurred the expense. The amounts reimbursed during any taxable year of Employee will not affect the amounts provided in any other taxable year of Employee, and Employee' s right to reimbursement for these amounts will not be subject to liquidation or exchange for any other benefit.

(d) Employee Benefits. Employee will be eligible to participate on the same basis as similarly situated employees in the Company' s employee benefit plans in effect from time to time during Employee' s employment. All matters of eligibility for coverage or benefits under any benefit plan will be determined in accordance with the provisions of those plans. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion.

3. TERMINATION OF EMPLOYMENT.

(a) Accrued Wages. On any termination of Employee' s employment, the Company will pay to Employee (or Employee' s legal representatives) any accrued but unpaid wages due to Employee.

(b) Coordination Following Termination. In connection with the termination of Employee' s employment for any reason, Employee will fully cooperate with the Company' s reasonable requests relating to the winding up of Employee' s work including, without limitation, any litigation in which the Company is involved, the signing of routine documents, and the issuance of any announcements concerning the termination.

(c) Executive Severance Benefit Plan. Employee is eligible to participate in the LipoScience, Inc. Executive Severance Benefit Plan (the "***Severance Plan***"), subject to the terms and conditions of such plan.

4. GENERAL PROVISIONS.

(a) Recovery. Any amounts paid to Employee by the Company, whether or not under this Agreement or the SLT Plan, will be subject to recoupment in accordance with The Sarbanes-Oxley Act of 2002, The Dodd‑Frank Wall Street Reform and Consumer Protection Act and any implementing regulations under these acts, any clawback policy adopted by the Company, or as otherwise required by applicable law. In addition, in consideration of Employee' s continued employment with the Company and in recognition of Employee' s position of trust and authority with the Company, Employee agrees to promptly consent to any clawback policy adopted by the Company.

(b) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law. If any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction. Rather, this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained in this Agreement.

(c) Waiver. If either party should waive any breach of any provisions of this Agreement, Employee or the Company will not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

(d) Complete Agreement. This Agreement, together with the Proprietary Agreement, which is incorporated by reference into this Agreement, constitutes the entire agreement between Employee and the Company with regard to the subject matter of this Agreement. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements. This Agreement is entered into without reliance on any promise or representation other than those expressly contained in this Agreement, and it cannot be modified or amended except in writing signed by Employee and an authorized officer of the Board. The Proprietary Agreement governs other aspects of the relationship between the parties, and has or may have provisions that survive termination

of Employee' s employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and is enforceable according to its terms without regard to the enforcement provision of this Agreement.

(e) Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

(f) Headings. The headings of the sections hereof are inserted for convenience only and will not be deemed to constitute a part hereof nor to affect the meaning thereof.

(g) Successors and Assigns. The Company will assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said company or other entity will by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. Employee may not assign or transfer this Agreement or any rights or obligations hereunder, other than to Employee' s estate upon Employee' s death.

(h) Choice of Law. This Agreement is to be governed by and construed in accordance with the laws of the North Carolina applicable to contracts made and to be performed wholly within such jurisdiction, and without regard to the conflicts of laws principles thereof. Any suit brought hereon will be brought in the state courts sitting in Wake County, North Carolina and the federal court sitting in Raleigh, North Carolina, and the parties hereby waiving any claim or defense that such forum is not convenient or proper. Each party agrees that any such court will have in personam jurisdiction over it and consents to service of process in any manner authorized by North Carolina law.

IN WITNESS WHEREOF, the parties have executed this Employment Agreement effective as of the day and year first written above.

ROBERT M. HONIGBERG, M.D.:

_____

(Signature)

LIPOSCIENCE, INC.:

_____

(Signature)

By: _____

Title: _____

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated April 27, 2012 (except for Note 18, as to which the date is January 10, 2013), in Amendment No. 7 to the Registration Statement (Form S-1 No. 333-175102) and related Prospectus of LipoScience, Inc. for the registration of shares of its common stock.

/s/ Ernst & Young LLP

Raleigh, North Carolina
January 10, 2013