Filed pursuant to Rule 424(b)(5)
Registration No. 333-151654

PROSPECTUS SUPPLEMENT
(To Prospectus dated June 11, 2010)

10,000,000 Shares of Common Stock
Series I Warrants to Purchase Up to 5,000,000 Shares of Common Stock
Series II Warrant to Purchase Up to 5,000,000 Shares of Common Stock

We are offering an aggregate of 10,000,000 shares of our common stock and warrants to purchase an aggregate of up to 10,000,000 shares of our common stock in this offering (and the shares of common stock issuable from time to time upon exercise of the warrants). The common stock and warrants will be sold in units, with each unit consisting of one share of common stock, a five-year warrant to purchase one half (0.50) of a share of common stock at an exercise price of $3.20 per share and a fifteen-month warrant to purchase one half (0.50) of a share of common stock at an exercise price of $2.94 per share. Each unit will be sold at a public offering price of $2.35 per unit. Units will not be issued or certificated. The shares of common stock and warrants are immediately separable and will be issued separately. Our common stock is listed on The Nasdaq Capital Market under the symbol "DSCO." On February 15, 2011, the last reported sale price of our common stock on The Nasdaq Capital Market was $2.94 per share.

Investing in our common stock involves significant risks. See "Risk Factors" beginning on page S-6 of this prospectus supplement and page 4 of the accompanying prospectus.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities, or passed upon the accuracy or adequacy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

		Per Unit		Total
Public offering price	$	2.3500	$	23,500,000
Underwriting discount	$	0.1645	$	1,645,000
Proceeds to us (before expenses)	$	2.1855	$	21,855,000

We estimate the total expenses of this offering payable by us, excluding underwriting discount, will be approximately $240,000.

We anticipate that delivery of the shares and warrants will be made on or about February 22, 2011, subject to customary closing conditions.

Sole Book-Running Manager
LAZARD CAPITAL MARKETS

Co-Managers
BOENNING & SCATTERGOOD, INC.

GLOBAL HUNTER SECURITIES

Prospectus Supplement dated February 16, 2011

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of the securities we are offering, including the price, the amount of common stock being offered and the risks of investing in our common stock, and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information, some of which may not apply to our common stock. This prospectus supplement and the accompanying prospectus are part of a "shelf" registration statement on Form S-3 that we filed with the Securities and Exchange Commission on June 13, 2008. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. You should read both this prospectus supplement and the accompanying prospectus together with the additional information about us described in the section entitled "Where You Can Find More Information and Incorporation by Reference." To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein or therein. We have not, and the underwriters have not, authorized anyone to provide you with information different from that contained in any of these documents. If anyone provides you with different or inconsistent information, you should not rely on it. The information contained in these documents is accurate only as of the date of each document, as the case may be, regardless of the time of delivery of this prospectus supplement and accompanying prospectus or of any sale of common stock. Our business, financial condition, results of operations and prospects may change after the date set forth in each document in which the information is presented.

We are making offers to sell and seeking offers to buy shares of common stock and warrants only in jurisdictions where offers and sales are permitted. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and warrants to purchase common stock and the distribution of this prospectus outside the United States. You should not consider this prospectus supplement and the accompanying prospectus to be an offer to sell, or a solicitation of an offer to buy, shares of common stock and warrants if the person making the offer or solicitation is not qualified to do so or if it is unlawful for you to receive the offer or solicitation.

References in the prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein to "we," "our," "us" and the "company" refer to Discovery Laboratories, Inc. and its subsidiary, unless the context requires otherwise.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement and in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before investing in our securities. The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information and financial statements and notes thereto appearing elsewhere in this prospectus supplement and the accompanying prospectus. Before you decide to invest in our securities, to fully understand this offering and its consequences to you, you should carefully read the entire prospectus supplement and the accompanying prospectus carefully, including the risk factors beginning on page S-6 of this prospectus supplement and beginning on page 4 of the accompanying prospectus, and the consolidated financial statements and related notes included or incorporated by reference in this prospectus supplement, the accompanying prospectus and the other documents incorporated by reference herein and therein.

Our Business

We are a biotechnology company developing surfactant therapies to treat respiratory disorders and diseases for which there frequently are few or no approved therapies. Our novel KL_4 proprietary technology produces a synthetic, peptide-containing surfactant ("KL_4 surfactant") that is structurally similar to pulmonary surfactant, a substance produced naturally in the lung and essential for survival and normal respiratory function. In addition, our proprietary capillary aerosol-generating technology ("capillary aerosolization technology") produces a dense aerosol with a defined particle size to potentially deliver our aerosolized KL_4 surfactant to the lung. As many respiratory disorders are associated with surfactant deficiency or surfactant degradation, we believe that our proprietary KL_4 technology platform makes it possible, for the first time, to develop a significant pipeline of surfactant products targeted to treat a wide range of previously unaddressed respiratory problems.

Recent Developments

Financial Update

As of December 31, 2010, we had cash and marketable securities of $10.2 million, representing a net decrease of $4.4 million from the previous quarter ended September 30, 2010.

Reverse Stock Split and Reduction in the Number of Authorized Shares of Common Stock

Effective December 28, 2010, we filed an amendment to our Certificate of Incorporation (i) to implement a 1-for-15 reverse stock split ("reverse split") of our common stock shares and (ii) to reduce the number of authorized shares of our common stock from 380 million shares to 50 million shares. These actions were authorized by our stockholders at the Annual Meeting of Stockholders held on December 21, 2010. Among other things, the reverse split was implemented to respond to a Staff Determination letter that we received from The Nasdaq Stock Market ("Nasdaq") on November 30, 2010 relating to our failure to regain compliance with Nasdaq Listing Rule 5550(a)(2) (the "Minimum Bid Price Rule") within the grace period previously granted to us. Following implementation of the reverse split, on January 11, 2011, we received notification from Nasdaq that we had regained compliance with the Minimum Bid Price rule and our common stock would continue to be listed on the Nasdaq Capital Market.

Pro forma Loss Per Share Adjusted for the Reverse Stock Split

The reverse split reduced the number of issued and outstanding shares of our common stock. As a result of the decrease in the weighted average number of shares outstanding, net loss per common share increased. The following table presents net loss per common share at December 31, 2008 and December 31, 2009 to give retrospective effect to the reverse split:

(in thousands, except per share data)	**(Unaudited)**	
	For the Year Ended December 31,	
	2008	**2009**
Net loss per common share – basic and diluted	$ (5.98)	$ (3.89)
Weighted average number of common shares outstanding – basic and diluted	6,541	7,680

Surfaxin® for the Prevention of Respiratory Distress Syndrome (RDS) in Premature Infants.

We believe that, to potentially gain U.S. Food and Drug Administration ("FDA") marketing approval for Surfaxin® (lucinactant) for the prevention of respiratory distress syndrome (RDS) in premature infants, we must satisfy the FDA as to the final validation of the fetal rabbit biological activity test ("BAT"). The BAT is an important quality control release and stability test for Surfaxin. Final BAT validation is intended to demonstrate to the satisfaction of the FDA (i) the ability of the BAT to adequately reflect the biological activity of Surfaxin throughout its shelf life and to discriminate biologically active from inactive Surfaxin drug product, and (ii) the comparability of drug product used in the Surfaxin Phase 3 clinical program with Surfaxin drug product to be manufactured for commercial use. We have been conducting a comprehensive preclinical program and have been interacting with the FDA in an effort to ensure that the comprehensive preclinical program ultimately will satisfy the FDA and that we will be able to potentially gain agreement with the FDA as to the final validation of the BAT. The data generated in connection with the comprehensive preclinical program is intended to be included in our Complete Response.

In connection with our comprehensive preclinical program, we implemented a number of method refinements in the BAT that are intended to optimize its performance and reduce assay variability. We subsequently employed the optimized BAT to generate data to support BAT validation. In addition, in a series of prospectively-designed, side-by-side preclinical studies (i.e., concordance studies) using the optimized BAT and the well-established preterm lamb model of RDS, we have generated data intended to demonstrate comparability of the drug product used in the Surfaxin Phase 3 clinical program with the Surfaxin drug product to be manufactured for commercial use. The comprehensive preclinical program also will provide data that will be used to gain the FDA's agreement on final acceptance criteria, with respect to biological activity as assessed by the BAT, for release and ongoing stability of Surfaxin drug product.

On January 10, 2011, we announced that, in response to a proposal that we had previously submitted, the FDA indicated that several aspects of our proposed approach to the validation of the BAT are reasonable and provided detailed, written direction regarding certain components of the comprehensive pre-clinical program. As previously reported, the FDA focused on certain technical criteria relating to final BAT validation and directed us to increase the sample size of specified data sets by testing additional Surfaxin batches. To respond to the FDA's direction, we plan to submit data from several Surfaxin batches that have been previously manufactured and analyzed, as well as from newly-manufactured Surfaxin batches.

In December 2010, we began manufacturing additional Surfaxin batches for use in the comprehensive preclinical program, if needed. Since then, we have manufactured four Surfaxin batches. The first batch has been fully tested and met all release criteria specifications. Testing of the second and third batches indicated that they do not meet one of the release specifications and cannot be used in the comprehensive preclinical program. At this time, preliminary testing of the fourth batch indicates that it meets specifications, including the specification that the prior two batches did not meet. In accordance with our quality assurance procedures and pharmaceutical manufacturing practices, we are conducting an investigation into the manufacture of the Surfaxin batches that did not meet specification to determine the probable cause. Although the investigation is ongoing, based on our preliminary assessment, we currently expect to resume the manufacture of Surfaxin batches for use in the comprehensive preclinical program in February 2011. *See*, "*Risk Factors – In connection with our efforts to manufacture Surfaxin drug product to be used in the conduct of our comprehensive preclinical program, two batches did not meet a release specification and, as a result, we are conducting an investigation into our manufacturing processes, which could cause a delay in the completion of the comprehensive preclinical program and the filing of our Complete Response*." In light of the foregoing and assuming that we are able to resume manufacturing in February 2011 as planned, we now believe that the filing of the Complete Response could occur in the third quarter 2011 and, as a result, potential Surfaxin approval could occur in the first quarter 2012.

In addition to including the results of the comprehensive preclinical program, the Surfaxin Complete Response will also include routine regulatory submissions, such as an updated clinical trial safety report for Surfaxin. Following the filing of the Complete Response and prior to gaining potential FDA marketing authorization, we also expect that the FDA will likely conduct a pre-approval inspection ("PAI") of our Totowa, NJ manufacturing facility and the quality assurance facilities for Surfaxin including those of third-party raw material suppliers and testing laboratories. Moreover, although we have previously discussed with the FDA the principal content of the Surfaxin package insert, we anticipate that the FDA may want to update the format and content of the package insert in connection with a potential Surfaxin approval to comply with mandated format changes as well as to reflect updated information regarding Surfaxin.

Company Information

We maintain our principal offices and research at 2600 Kelly Road, Suite 100, Warrington, Pennsylvania. Our telephone number is 215-488-9300. Our website address is *www.discoverylabs.com* . Information contained in, or accessible through, our website does not constitute a part of this prospectus supplement or the accompanying prospectus.

THE OFFERING

Common Stock offered	10,000,000 shares
Five-Year Warrants offered	Warrants to purchase up to 5,000,000 shares of common stock, exercisable beginning on the date of original issuance and at any time up to the date that is five years after such date at an exercise price of $3.20 per share of common stock. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the warrants.
Fifteen-Month Warrants offered	Warrants to purchase up to 5,000,000 shares of common stock, exercisable beginning on the date of original issuance and at any time up to the date that is fifteen months after such date at an exercise price of $2.94 per share of common stock. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the warrants.
Common stock to be outstanding after this offering (1)	23,258,206 shares on a pro forma basis, after giving effect to the 1:15 reverse split
Risk Factors	See “Risk Factors” beginning on page S-6 of this prospectus supplement and page 4 of the accompanying prospectus for a discussion of factors you should consider carefully when making an investment decision.
Use of proceeds	The net proceeds from this offering will be used for general corporate purposes, including to support research and development activities, which include: · Expenses related to resolving the key remaining Chemistry, Manufacturing and Controls (CMC) issue that must be addressed to potentially gain U.S. regulatory approval of Surfaxin® for the prevention of RDS, including completion of the ongoing comprehensive pre-clinical program, the filing of the Complete Response and preparation for the potential approval of Surfaxin in the first quarter 2012. · Limited investments in our Surfaxin LS™ and Aerosurf® programs, which, together with Surfaxin, are focused on redefining and improving the management of neonatal patients with RDS. Surfaxin LS is a lyophilized formulation of Surfaxin that is manufactured as a dry powder and reconstituted as a liquid prior to administration and offers ease of administration and other potential benefits. Aerosurf, our KL_4 surfactant in aerosolized form, is a drug-device combination product based on our proprietary capillary aerosolization technology and potentially can be administered without the invasive procedures that are required for the currently-approved surfactants. See “Use of Proceeds” on page S-11.
The Nasdaq Capital Market Symbol	DSCO

(1) The number of shares of common stock to be outstanding immediately after this offering as shown above is based on 198,873,094 shares of common stock actually outstanding as of September 30, 2010, or 13,258,206 shares on a pro forma basis after giving effect to the 1-for-15 share consolidation, or reverse stock split, on December 28, 2010. This pro forma number excludes the 10,000,000 shares issuable upon the exercise of the warrants offered hereby and also excludes (on a pro forma basis): (i) 959,344 shares of our common subject to options outstanding as of September 30, 2010, which have a weighted average exercise price of $56.47 per share; (ii) 4,269,682 shares of common stock issuable upon exercise of warrants outstanding as of September 30, 2010, at a weighted average exercise price of $11.02 per share; (iii) 75,061 shares of common reserved for potential future issuance pursuant to our 401(k) Plan as of September 30, 2010; and (iv) 3,227,140 shares of common stock reserved for potential future issuance pursuant to three Committed Equity Financing Facilities, as of September 30, 2010 (of which one facility has since expired).

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein,contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The forward-looking statements are only predictions and provide our current expectations or forecasts of future events and financial performance and may be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "will" or "should" or, in each case, their negative, or other variations or comparable terminology, though the absence of these words does not necessarily mean that a statement is not forward-looking. Forward-looking statements include all matters that are not historical facts and include, without limitation statements concerning: our business strategy, outlook, objectives, future milestones, plans, intentions, goals, and future financial condition, including the period of time for which our existing resources will enable us to fund our operations; plans regarding our efforts to gain U.S. regulatory approval for our lead product, Surfaxin® (lucinactant) for the prevention of respiratory distress syndrome (RDS) in premature infants; the possibility, timing and outcome of submitting regulatory filings for our products under development; our research and development programs for our KL_4 surfactant technology and our capillary aerosolization technology platform, including planning for and timing of any clinical trials and potential development milestones; the development of financial, clinical, manufacturing and distribution plans related to the potential commercialization of our drug products, if approved; and plans regarding potential strategic alliances and other collaborative arrangements with pharmaceutical companies and others to develop, manufacture and market our products.

We intend that all forward-looking statements be subject to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are subject to many risks and uncertainties that could cause actual results to differ materially from any future results expressed or implied by the forward-looking statements. We caution you therefore against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Examples of the risks and uncertainties include, but are not limited to:

- risks related generally to our efforts to gain regulatory approval, in the United States and elsewhere, for our drug product candidates, including our lead products that we are developing to address respiratory distress syndrome (RDS) in premature infants: Surfaxin for the prevention of RDS, Surfaxin LS™ (our lyophilized KL_4 surfactant) and Aerosurf® (our aerosolized KL_4 surfactant);

- the risk that we and the FDA or other regulatory authorities will not be able to agree on matters raised during the regulatory review process, or that we may be required to conduct significant additional activities to potentially gain approval of our product candidates, if ever;

- the risk that the FDA or other regulatory authorities may not accept, or may withhold or delay consideration of, any applications that we may file, or may not approve our applications or may limit approval of our products to particular indications or impose unanticipated label limitations;

- risks relating to the rigorous regulatory approval processes, including pre-filing activities, required for approval of any drug or combination drug-device products that we may develop, whether independently, with strategic development partners or pursuant to collaboration arrangements;

- the risk that the FDA will not be satisfied with the results of our efforts to (i) finally validate our optimized BAT, (ii) demonstrate that the BAT has the ability to adequately reflect the biological activity of Surfaxin throughout its shelf life and to discriminate biologically active from inactive Surfaxin drug product, and (iii) demonstrate the comparability of drug product used in the Surfaxin Phase 3 clinical program with Surfaxin drug product to be manufactured for commercial use through prospectively-designed, side-by-side preclinical studies (i.e., concordance studies) using the optimized BAT and the well-established preterm lamb model of RDS;

- the risk that the FDA may not approve Surfaxin or may subject the marketing of Surfaxin to onerous requirements that significantly impair marketing activities;

- the risk that we may identify unforeseen problems that have not yet been discovered or the FDA could in the future impose additional requirements to gain approval of Surfaxin;

- risks, if we succeed in gaining approval of Surfaxin and our other drug products, that reimbursement and health care reform may adversely affect us;

- risks relating to our efforts to manufacture additional batches of Surfaxin for use in our comprehensive preclinical program and to complete the investigation into the manufacture of the two batches manufactured in January 2011 that did not meet specification;

- the risk that changes in the national or international political and regulatory environment may make it more difficult to gain FDA or other regulatory approval of our drug product candidates;

- risks relating to our research and development activities, which involve time-consuming and expensive preclinical studies and other efforts, and potentially multiple clinical trials, which may be subject to potentially significant delays or regulatory holds, or fail, and which must be conducted using sophisticated and extensive analytical methodologies, including an acceptable biological activity test, if required, as well as other quality control release and stability tests to satisfy the requirements of the regulatory authorities;

- risks relating to our ability to develop and manufacture drug products and drug-device combination products based on our capillary aerosolization technology for clinical studies and, if approved, for commercialization of our products;

- risks relating to the transfer of our manufacturing technology to third-party contract manufacturers and assemblers;

- the risk that we, our contract manufacturers or any of our third-party suppliers may encounter problems or delays in manufacturing or assembling drug products, drug product substances, capillary aerosolization devices and related components and other materials on a timely basis or in an amount sufficient to support our development efforts and, if our products are approved, commercialization;

- the risk that we may be unable to identify potential strategic partners or collaborators with whom we can develop and, if approved, commercialize our products in a timely manner, if at all;

- the risk that we or our strategic partners or collaborators will not be able to attract or maintain qualified personnel;

- the risk that, if approved, market conditions, the competitive landscape or otherwise may make it difficult to launch and profitably sell our products;

- the risk that we may not be able to raise additional capital or enter into strategic alliances or collaboration agreements (including strategic alliances for development or commercialization of our drug products and combination drug-device products);

- risks that the unfavorable credit environment will adversely affect our ability to fund our activities, that our share price may not remain at the price level necessary for us to access capital under our Committed Equity Financing Facilities (CEFFs), that the CEFFs may expire before we are able to access the full dollar amount potentially available thereunder, and that additional equity financings could result in substantial equity dilution;

- the risk that, although we have regained compliance with the Minimum Bid Price Requirement of The Nasdaq Capital Market® by implementing a reverse split, we will be unable to maintain compliance with the listing requirements of Nasdaq, including without limitation those relating to market capitalization and stockholders equity, which could increase the probability that our stock will be delisted from Nasdaq, which could cause our stock price to decline;

- the risk that recurring losses, negative cash flows and an inability to raise sufficient additional capital could threaten our ability to continue as a going concern;

- the risks that we may be unable to maintain and protect the patents and licenses related to our products and that other companies may develop competing therapies and/or technologies;

- the risk that we may become involved in securities, product liability and other litigation;

- the risk that we will not successfully remediate the recently-identified material weakness related to initial classification and accounting for registered warrants as liabilities or equity, which resulted in the restatement of our financial statements for periods ended June 30, 2009 through June 30, 2010; and

- other risks and uncertainties, including those described in our most recent Annual Report on Form 10-K and other filings with the Securities and Exchange Commission, on Forms 10-Q and 8-K, and any amendments thereto.

Pharmaceutical and biotechnology companies have suffered significant setbacks in advanced clinical trials, even after obtaining promising earlier trial results. Data obtained from such clinical trials are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. After gaining approval of a drug product, pharmaceutical companies face considerable challenges in marketing and distributing their products, and may never become profitable.

The forward-looking statements contained in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference herein or therein speak only of their respective dates. Except to the extent required by applicable laws, rules and regulations, we do not undertake to publicly announce revisions to any of the forward-looking statements in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference herein or therein, whether as a result of new information, future events or otherwise.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider the following risk factors, the risk factors contained in the accompanying prospectus beginning on page 4, the risk factors contained in our Form 10-K (as amended) for the year ended December 31, 2009 and our Form 10-Qs (as amended) for the quarterly periods ended March 31, 2010, June 30, 2010 and September 30, 2010, as well as other information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, before deciding to purchase any of our securities. The risks and uncertainties described below and incorporated by reference herein are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may become important factors that affect us. If any of these risks occur, our business could suffer, the market price of our common stock could decline and you could lose all or part of your investment in our securities.

Risks Related to Our Company

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results, and current and potential stockholders may lose confidence in our financial reporting.

We are required by the SEC to establish and maintain adequate internal control over financial reporting that provides reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. We are likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses in those internal controls.

As described in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, in connection with the restatement process for the periods ended beginning June 30, 2009 through June 30, 2010, we identified a material weakness in our internal control regarding our process and procedures related to the initial classification and subsequent accounting of registered warrants as liabilities or equity instruments dating back to May 2009. Upon a reassessment of those financial instruments, in light of GAAP as currently interpreted, we determined that we should have accounted for registered warrants that we issued in May 2009 and February 2010 as derivative liabilities instead of equity. Given this material weakness, management was unable to conclude that we maintained effective internal control over financial reporting as of September 30, 2010.

We are taking steps to enhance our processes to identify and intelligently apply developments in accounting to better evaluate our research and understanding of the nuances of increasingly complex accounting standards. Our plans include providing enhanced access to accounting literature, research materials and documents and increased communication among our legal and finance personnel and third party professionals with whom we consult regarding complex accounting applications. The elements of our remediation plan can only be accomplished over time and we can offer no assurance that these initiatives will ultimately have the intended effects.

Any failure to maintain such internal controls could adversely impact our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis as required by the SEC and Nasdaq, we could face severe consequences from those authorities. In either case, there could result a material adverse effect on our business. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock. We can give no assurance that the measures we have taken and plan to take in the future will remediate the material weaknesses identified or that any additional material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, even if we are successful in strengthening our controls and procedures, in the future those controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements.

We depend upon key employees and consultants in a competitive market for skilled personnel. If we are unable to attract and retain key personnel, it could adversely affect our ability to develop and market our products.

We are highly dependent upon the members of our executive management team and our directors, as well as our scientific advisory board members, consultants and collaborating scientists. Many of these individuals have been involved with us for many years, have played integral roles in our progress and we believe that they continue to provide value to us. A loss of any of our key personnel may have a material adverse effect on aspects of our business and clinical development and regulatory programs.

Following the resignation of our former President and Chief Executive Officer and a member of our Board of Directors in August 2009, our Board elected W. Thomas Amick, our Chairman of the Board, to act as Chief Executive Officer on an interim basis. In October 2010, Mr. Amick joined our company on a full-time basis as Chief Executive Officer. Until October, Mr. Amick was otherwise employed by another biotech company as its Chief Executive Officer, and was able to devote only a portion of his time to his duties as our interim Chief Executive Officer.

As of September 30, 2010, we had employment agreements with four executive officers other than Mr. Amick, including: President and Chief Financial Officer and Treasurer; Executive Vice President, General Counsel and Secretary; Chief Operating Officer; and Senior Vice President, Human Resources. These agreements (and Mr. Amick's agreement) provide for automatic one-year renewal at the end of each term, unless otherwise terminated by either party. As no notices of non-renewal have been issued with respect to the current term, these agreements have been extended to May 2012. As of October 18, 2010, we entered into an executive employment agreement with Mr. Amick, which expires in October 2011. In addition, in May 2010, we entered into retention agreements with five other officers under which each officer is provided certain severance benefits, based on title. The loss of services from any of our executives could significantly adversely affect our ability to develop and market our products and obtain necessary regulatory approvals. Further, we do not maintain key-man life insurance.

We expect that, once we have secured sufficient strategic and financial resources to support our operations, including the continuing development of our KL_4 surfactant technology, we will seek to attract candidates to join our management and development teams, although there can be no assurances that we will be successful in that endeavor. Moreover, although our executive employment agreements with our five senior officers generally include non-competition covenants and provide for severance payments that are contingent upon the applicable employee's refraining from competition with us, the applicable noncompete provisions can be difficult and costly to monitor and enforce, such that we may not be successful in retaining these individuals and, if any should resign, in enforcing our noncompetition agreements with them.

Our future success also will depend in part on the continued service of our key scientific and management personnel and our ability to identify, hire and retain additional personnel. While we attempt to provide competitive compensation packages to attract and retain key personnel at all levels in our organization, many of our competitors have greater resources and more experience than we do, making it difficult for us to compete successfully for key personnel. We may experience intense competition for qualified personnel and the existence of non-competition agreements between prospective employees and their former employers may prevent us from hiring those individuals or subject us to lawsuits brought by their former employers.

In connection with our efforts to manufacture Surfaxin drug product to be used in the conduct of our comprehensive preclinical program, two batches did not meet a release specification and, as a result, we are conducting an investigation into our manufacturing processes, which could cause a delay in the completion of the comprehensive preclinical program and the filing of our Complete Response.

In December 2010, we began manufacturing additional Surfaxin batches for use in our comprehensive preclinical program, if needed. Since then, we have manufactured four Surfaxin batches, the second and third of which did not meet one of the release specifications. In accordance with our quality assurance procedures and pharmaceutical manufacturing practices, we initiated an investigation into the manufacture of these batches to determine the probable cause. Although the investigation is ongoing, based on our preliminary assessment, we currently expect to resume the manufacture of Surfaxin batches for use in the comprehensive preclinical program in February 2011. Assuming that we are able to resume manufacturing in February 2011 and also assuming that the additional batches that we plan to manufacture pass all release and stability specifications, we believe that the filing of the Complete Response could occur in the third quarter 2011 and, as a result, potential Surfaxin approval could occur in the first quarter 2012.

Although we believe that we will be successful in our efforts to manufacture a requisite number of Surfaxin batches to potentially satisfy the FDA within the time frame provided above, there can be no assurance that we will be able to complete the manufacture of the requisite number of batches within that time frame or that other batches that we manufacture will not fail to meet release or stability specifications. If additional newly-manufactured batches fail to meet specifications for any reason, it will be necessary to initiate additional investigations to determine the probable cause of any such failures, which could result in further delays of the filing of our Complete Response. Furthermore, to complete the manufacture of additional replacement batches, we may be required to purchase drug product substances and excipients, which could involve order lead times and acceptance testing activities. Failure to complete the manufacture of a sufficient number of batches to potentially satisfy the FDA could have a material, adverse effect on our ability to gain regulatory approval of Surfaxin and on our business.

Risks Related to this Offering and Our Common Stock

The market price of our stock may be adversely affected by market volatility.

The market price of our common stock, like that of many other development stage pharmaceutical or biotechnology companies, has been and is likely to be volatile. In addition to general economic, political and market conditions, the price and trading volume of our stock could fluctuate widely in response to many factors, including:

- announcements of the results of clinical trials by us or our competitors;
- patient adverse reactions to drug products;

- governmental approvals, delays in expected governmental approvals or withdrawals of any prior governmental approvals or public or regulatory agency concerns regarding the safety or effectiveness of our products;
- changes in the United States or foreign regulatory policy during the period of product development;
- changes in the United States or foreign political environment and the passage of laws, including tax, environmental or other laws, affecting the product development business;
- developments in patent or other proprietary rights, including any third party challenges of our intellectual property rights;
- announcements of technological innovations by us or our competitors;
- announcements of new products or new contracts by us or our competitors;
- actual or anticipated variations in our operating results due to the level of development expenses and other factors;
- changes in financial estimates by securities analysts and whether our earnings meet or exceed the estimates;
- conditions and trends in the pharmaceutical and other industries;
- new accounting standards; and
- the occurrence of any of the risks described in these "Risk Factors" or in our Annual Report on Form 10-K for the year ended December 31, 2009 or our other public filings.

In addition, the price of our common stock could also be affected by market factors, including rebalancing of portfolios by institutional investors and resetting of indexes. Our common stock is listed for quotation on The Nasdaq Capital Market. During the twelve month period ended December 31, 2010, the price of our common stock ranged from $12.58 to $2.52 (as adjusted for the 1-for-15 reverse split effective December 28, 2010). We expect the price of our common stock to remain volatile. The average daily trading volume in our common stock varies significantly. For the twelve month period ended December 31, 2010, the average daily trading volume in our common stock was approximately 175,455 shares (as adjusted for the 1-for-15 reverse split) and the average number of transactions per day was approximately 2,465. The instability observed in our daily volume and number of transactions per day may affect the ability of our stockholders to sell their shares in the public market at prevailing prices.

In the past, following periods of volatility in the market price of the securities of companies in our industry, securities class action litigation has often been instituted against companies in our industry. Even if securities class actions that we may face in the future are ultimately determined to be meritless or unsuccessful, they involve substantial costs and a diversion of management attention and resources, which could negatively impact our business.

A substantial number of shares may be sold in the market following this offering, which may depress the market price for our common stock.

Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. Upon completion of this offering and based on the number of shares outstanding as of September 30, 2010, we will have outstanding an aggregate of approximately 23.3 million shares of common stock on a pro forma basis, as adjusted for the 1-for-15 reverse split, and assuming no exercise of outstanding options or warrants. A substantial majority of the outstanding shares of our common stock are, and all of the shares sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act of 1933 unless these shares are purchased by affiliates. In addition, as of January 31, 2011, 5,291,369 shares of our common stock are issuable upon exercise of outstanding options and warrants granted by us, which also have been registered or registered for resale on registration statements filed with the Securities and Exchange Commission. The outstanding options have a weighted average exercise price of $56.04 per share and expire between February 5, 2011 and January 18, 2021. The outstanding warrants have a weighted average exercise price of $10.90 per share and expire between March 22, 2011 and December 11, 2015.

Our management will have broad discretion with respect to the use of the proceeds of this offering.

Although we have highlighted the intended use of proceeds for this offering, our management will have broad discretion as to the application of these net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds.

You will experience immediate dilution in the book value per share of the common stock you purchase.

You will suffer substantial immediate dilution in the net tangible book value of the common stock you purchase in this offering because the price per share of our common stock being offered hereby is substantially higher than the book value per share of our common stock. Based on the public offering price of $2.35 per share and the sale of 10,000,000 shares in this offering, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of $0.99 per share in the net tangible book value of the common stock. See “Dilution” on page S-11 for a more detailed discussion of the dilution you will incur in this offering.

USE OF PROCEEDS

We estimate the net proceeds from the securities offered pursuant to this prospectus to be approximately $21.6 million excluding the proceeds, if any, from the exercise of the warrants issued in this offering and after deducting the estimated underwriting discount and other estimated offering expenses, based on the sale of 10,000,000 units at a public offering price of $2.35 per unit. Except as described in any later prospectus supplement or post-effective amendment, we currently anticipate using the net proceeds from the sale of our common stock and warrants primarily for general corporate purposes, including to support research and development activities, which include:

- Expenses related to resolving the key remaining Chemistry, Manufacturing and Controls (CMC) issue that must be addressed to potentially gain U.S. regulatory approval of Surfaxin for the prevention of RDS, including completion of the ongoing comprehensive pre-clinical program, the filing of the Complete Response and preparation for the potential approval of Surfaxin in the first quarter 2012.

- Limited investments in our Surfaxin LS and Aerosurf programs, which, together with Surfaxin, are focused on redefining and improving the management of neonatal patients with RDS. Surfaxin LS is a lyophilized formulation of Surfaxin that is manufactured as a dry powder and reconstituted as a liquid prior to administration and offers ease of administration and other potential benefits. Aerosurf, our KL_4 surfactant in aerosolized form, is a drug-device combination product based on our proprietary capillary aerosolization technology and potentially can be administered without the invasive procedures that are required for the currently-approved surfactants.

The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as the progress of our research and development efforts, technological advances and the competitive environment for Surfaxin and our other SRT drug candidates and their intended uses. Pending the application of the net proceeds, we intend to invest the proceeds in short-term, interest-bearing instruments or other investment-grade securities.

DILUTION

The net tangible book value of our common stock on September 30, 2010, was approximately $10.1 million, or approximately $0.05 per share. Net tangible book value per share is equal to the amount of our total tangible assets, less total liabilities, divided by the aggregate number of shares of common stock outstanding. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of our common stock in this offering and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering. For purposes of this calculation, the entire purchase price for the unit is being allocated to the common stock contained in the unit.

After giving effect to the 1-for-15 reverse split effective on December 28, 2010, our pro forma net tangible book value as of September 30, 2010 would have been approximately $0.76 per share. After giving effect to the sale of 10,000,000 shares of our common stock in this offering at an public offering price equal to $2.35 per share, and after deducting the underwriting discount and the estimated offering expenses, but excluding any effects of potential exercises of the warrants issued in this offering, our pro forma as adjusted net tangible book value on September 30, 2010 would have been approximately $31.7 million, or approximately $1.36 per share. This represents an immediate increase in the net tangible book value of $0.60 per share to existing shareholders and an immediate dilution of $0.99 per share to new investors purchasing shares of common stock in this offering. The following table illustrates this dilution:

Public offering price per share included in each unit	$	2.35
Net tangible book value per share as of September 30, 2010	$	0.05
Increase per share attributable to the 1-for-15 reverse stock split	$	0.71
Pro forma net tangible book value per share as of September 30, 2010, after giving effect to the reverse stock split	$	0.76
Increase per share attributable to this offering	$	0.60
Pro forma as adjusted net tangible book value per share as of September 30, 2010, after giving effect to the reverse stock split and this offering	$	1.36
Dilution per share to new investors	$	0.99

In addition, investors that purchase common stock upon the exercise of the warrants offered hereby may experience dilution depending on our net tangible book value at the time of exercise. The foregoing table does not take into account further dilution to new investors that could occur upon the exercise of outstanding options and warrants having a per share exercise price less than the per share offering price to the public in this offering. As of September 30, 2010, there were 198,873,094 shares of common stock outstanding, or 13,258,206 shares on a pro forma basis after giving effect to the 1-for-15 share consolidation, or reverse stock split, on December 28, 2010. This pro forma number does not include (on a pro forma basis):

- 959,344 shares of common stock issuable upon exercise of options outstanding as of September 30, 2010, at a weighted average exercise price of $56.47 per share;
- 4,269,682 shares of common stock issuable upon exercise of warrants outstanding as of September 30, 2010, at a weighted average exercise price of $11.02 per share;
- 75,061 shares of common stock reserved for potential future issuance pursuant to our 401(k) Plan as of September 30, 2010; and
- 3,277,140 shares of common stock reserved for potential future issuance pursuant to three Committed Equity Financing Facilities as of September 30, 2010 (of which one facility has since expired).

DESCRIPTION OF SECURITIES WE ARE OFFERING

In this offering, we are offering a maximum of 10,000,000 units, consisting of 10,000,000 shares of common stock, five-year warrants to purchase an aggregate of up to 5,000,000 shares of common stock and fifteen-month warrants to purchase an aggregate of up to 5,000,000 shares of common stock (and the shares of common stock issuable from time to time upon exercise of the warrants). Each unit consists of one share of common stock, one five-year warrant to purchase one half (0.50) of a share of common stock at an exercise price of $3.20 per share and one fifteen-month warrant to purchase one half (0.50) of a share of common stock at an exercise price of $2.94 per share. Units will not be issued or certificated. The shares of common stock and warrants are immediately separable and will be issued separately. This prospectus supplement also relates to the offering of shares of our common stock upon exercise, if any, of the warrants.

Common Stock

The material terms and provisions of our common stock and each other class of our securities which qualifies or limits our common stock are described under the caption "Description of Common Stock" starting on page 34 of the accompanying prospectus.

Warrants

The following summary of certain terms and provisions of the warrants offered hereby is not complete and is subject to, and qualified in its entirety by reference to, the terms and provisions set forth in the forms of warrant attached as exhibits 4.1 and 4.2 to our current report on Form 8-K filed on February 16, 2011. Prospective investors should carefully review the terms and provisions set forth in the forms of warrant.

Terms Applicable to Five-Year Warrants

The five-year warrants are exercisable beginning on the date of original issuance and at any time up to the date that is five years after such date, at an exercise price of $3.20 per share of common stock being purchased. The five-year warrants contain anti-dilution protection upon the issuance of any common stock, securities convertible into common stock, or certain other issuances at a price below the then-existing exercise price of the warrants, with certain exceptions. The terms of the five-year warrants, including the full-ratchet anti-dilution provisions, may make it difficult for us to raise additional capital consistent with prevailing market terms, if at all.

Terms Applicable to Fifteen-Month Warrants

The fifteen-month warrants are exercisable beginning on the date of original issuance and at any time up to the date that is fifteen months after such date, at an exercise price of $2.94 per share of common stock being purchased.

Warrants

Exercisability. The warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). Unless otherwise specified in the warrant, the holder will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants.

Cashless Exercise. If a registration statement covering the issuance of the shares of common stock underlying the warrants is not effective and an exemption from registration for the issuance and resale of such shares would only be available if the exercise of the warrants is effected pursuant to a cashless exercise, then the holder may exercise the warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, elect instead to receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the warrant. There is no circumstance that requires us to effect a net cash settlement of the warrants.

Adjustment of Exercise Price. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders. In addition, the exercise price of the five-year warrants is subject to adjustment as described above in "Terms Applicable to Five-Year Warrants."

Transferability. Subject to applicable laws, the warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. We do not plan on making an application to list the warrants on The Nasdaq Capital Market, any other national securities exchange or other nationally recognized trading system.

Fundamental Transactions. We will not enter into or be party to a fundamental transaction, which is a merger or other change of control transaction, as described in the warrants, unless the successor entity, as described in the warrants, assumes the warrants and delivers new warrants that are substantially similar. If we enter into, or are a party to, a fundamental transaction pursuant to which our stockholders are entitled or required to receive securities issued by another company or cash or other assets in exchange for shares of our common stock, which we refer to as a corporate event, a holder of a warrant will have the right to receive, upon an exercise of the warrant, consideration as if the holder had exercised its warrant immediately prior to such corporate event.

Rights as a Stockholder. Except as otherwise provided in the warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the warrant.

Waivers and Amendments. Any term of the warrants may be amended or waived with our written consent and the written consent of the holders of warrants.

UNDERWRITING

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus supplement, Lazard Capital Markets LLC, Boenning & Scattergood, Inc. and Global Hunter Securities, LLC, as underwriters, have agreed to purchase, and we have agreed to sell to them, the number of units (each unit consisting of one share of common stock, one five-year warrant to purchase one half (0.50) of a share of common stock and one fifteen-month warrant to purchase one half (0.50) of a share of common stock) at the public offering price, less the underwriting discount, as set forth on the cover page of this prospectus supplement, as indicated below:

Underwriters	Number of Units
Lazard Capital Markets LLC	7,500,000
Boenning & Scattergood, Inc.	1,500,000
Global Hunter Securities, LLC	1,000,000
Total:	10,000,000

The underwriters are offering the units subject to its acceptance of the securities included in the units from us and subject to prior sale. The underwriting agreement provides that the obligations of the underwriters to pay for and accept delivery of the units offered by this prospectus supplement are subject to the approval of certain legal matters by their counsel and to other conditions. The underwriters are obligated to take and pay for all of the units offered by this prospectus supplement if any such units are taken.

The underwriters initially propose to offer the units directly to the public at the public offering price listed on the cover page of this prospectus supplement. After the initial offering of the units, the offering price and other selling terms may from time to time be varied by the underwriters.

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of customary legal opinions, letters and certificates.

Discount and Expenses

The following table summarizes the public offering price, underwriting discount and proceeds before expenses to us:

	Per Unit	Total
Public offering price	$ 2.3500	$ 23,500,000
Underwriting discount	$ 0.1645	$ 1,645,000
Proceeds to us (before expenses)	$ 2.1855	$ 21,855,000

The expenses of the offering, not including the underwriting discount, payable by us are estimated to be $240,000, which includes $75,000 that we have agreed to reimburse the underwriters for their legal fees incurred in connection with this offering. Lazard Frères & Co. LLC referred this transaction to Lazard Capital Markets LLC and will receive a referral fee from Lazard Capital Markets LLC in connection therewith; however, such referral fee is not in addition to the fee paid by us to Lazard Capital Markets LLC described above. The aggregate value of all compensation received or to be received by participating FINRA members does not exceed 8% of the offering proceeds.

Listing on The Nasdaq Capital Market

Our shares of common stock included in the units are listed on The Nasdaq Capital Market under the symbol “DSCO.” Our registrar and transfer agent for all shares of common stock is Continental Stock Transfer & Trust Company.

No Sales of Similar Securities

We and, each of our executive officers and directors, subject to certain exceptions, have agreed with the underwriters not to dispose of or hedge any of our shares of common stock or securities convertible into or exercisable or exchangeable for common stock for 90 days after the date of this prospectus without first obtaining the written consent of Lazard Capital Markets LLC. However, we may issue securities (i) pursuant to our employee benefit and compensation plans and (ii) in connection with strategic alliances involving us and in other cases as specified in the underwriting agreement. The 90-day “lock-up” period is subject to extension such that, in the event that either (i) during the last 17 days of the “lock-up” period, we issue an earnings or financial results release or material news or a material event relating to us occurs, or (ii) prior to the expiration of the “lock-up” period, we announce that we will release earnings or financial results during the 16-day period beginning on the last day of the “lock-up” period, then in either case the expiration of the “lock-up” period will be extended until the expiration of the 18-day period beginning on the issuance of the earnings or financial results release or the occurrence of the material news or material event, as applicable, unless Lazard Capital Markets LLC waives, in writing, such an extension.

Price Stabilization, Short Positions

In order to facilitate the offering of the units, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock. Specifically, the underwriters may sell more units than they are obligated to purchase under the underwriting agreement, creating a short position. The underwriters must close out any short position by purchasing shares of common stock in the open market. A short position may be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchased in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of our common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of our common stock above independent market levels or prevent or slow a decline in the market price of our common stock. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other, and we have also agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended, and liabilities arising from breaches of representations and warranties contained in the underwriting agreement. We have also agreed to contribute to payments the underwriters and Lazard Frères & Co. LLC may be required to make in respect of such liabilities.

A prospectus in electronic format may be made available on websites maintained by the underwriters. The underwriters may agree to allocate a number of units to other underwriters for sale to its online brokerage account holders. Internet distributions will be allocated by the underwriters on the same basis as other allocations.

United Kingdom

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (e) of the Order (all such persons together being referred to as "relevant persons"). The units are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such units will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

The underwriters have represented and agreed that:

(a) they have only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 or FSMA) received by them in connection with the issue or sale of the units in circumstances in which Section 21(1) of the FSMA does not apply to us, and

(b) they have complied with, and will comply with all applicable provisions of FSMA with respect to anything done by them in relation to the units in, from or otherwise involving the United Kingdom.

European Economic Area

To the extent that the offer of the units is made in any Member State of the European Economic Area that has implemented the Prospectus Directive before the date of publication of a prospectus in relation to the units which has been approved by the competent authority in the Member State in accordance with the Prospectus Directive (or, where appropriate, published in accordance with the Prospectus Directive and notified to the competent authority in the Member State in accordance with the Prospectus Directive), the offer (including any offer pursuant to this document) is only addressed to qualified investors in that Member State within the meaning of the Prospectus Directive or has been or will be made otherwise in circumstances that do not require us to publish a prospectus pursuant to the Prospectus Directive.

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), the underwriters have represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date") they have not made and will not make an offer of shares to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of units to the public in that Relevant Member State at any time:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities,

(b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts, or

(c) in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive. For the purposes of this provision, the expression an "offer of units 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 and the units to be offered so as to enable an investor to decide to purchase or subscribe the units, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

The EEA selling restriction is in addition to any other selling restrictions set out below. In relation to each Relevant Member State, each purchaser of units (other than the underwriters) will be deemed to have represented, acknowledged and agreed that it will not make an offer of units to the public in any Relevant Member State, except that it may, with effect from and including the date on which the Prospectus Directive is implemented in the Relevant Member State, make an offer of units to the public in that Relevant Member State at any time in any circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive, provided that such purchaser agrees that it has not and will not make an offer of any units in reliance or purported reliance on Article 3(2)(b) of the Prospectus Directive. For the purposes of this provision, the expression an "offer of units to the public" in relation to any units in any Relevant Member State has the same meaning as in the preceding paragraph.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon by SNR Denton US LLP, New York, New York. Proskauer Rose LLP, New York, New York, is acting as counsel for the underwriters in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K/A for the year ended December 31, 2009, and the effectiveness of our internal control over financial reporting as of December 31, 2009, as set forth in their reports, which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION AND INCORPORATION BY REFERENCE

We file annual, quarterly and periodic reports, proxy statements and other information with the SEC. You may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Many of our SEC filings are also available to the public from the SEC's Website at "http://www.sec.gov." We make available free of charge our annual, quarterly and current reports, proxy statements and other information upon request. To request such materials, please send an e-mail to ir@DiscoveryLabs.com or contact John G. Cooper, our President and Chief Financial Officer, at our address as set forth in the accompanying prospectus.

We maintain a website at "*http://www.DiscoveryLabs.com*" (this is not a hyperlink, you must visit this website through an Internet browser). Our website and the information contained therein or connected thereto are not incorporated into this prospectus supplement.

We have filed with the Securities and Exchange Commission a registration statement on Form S-3 under the Securities Act relating to the common stock we are offering by this prospectus supplement. The SEC allows us to "incorporate by reference" the information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede information in this prospectus supplement. We incorporate by reference the documents listed below and any future filings we make with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, until this offering is completed:

1. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2009, filed on March 10, 2010, as amended by our Annual Report on Form 10-K/A, filed on April 30, 2010 as further amended by our Annual Report on Form 10-K/A, filed on November 15, 2010;

2. Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed on November 15, 2010, our Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, filed on August 9, 2010 as amended by our Quarterly Report on Form 10-Q/A, filed on November 15, 2010, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 10, 2010 as amended by our Quarterly Report on Form 10-Q/A, filed on November 15, 2010;

3. Our Current Reports on Form 8-K filed with the SEC on February 16, 2010, February 18, 2010, February 26, 2010, March 15, 2010 (excluding the matters in Item 2.02 and Exhibit 99.1 therein, which are not incorporated by reference herein), April 28, 2010 (excluding the matters in Item 2.02 and Exhibit 99.1 therein, which are not incorporated by reference herein), April 29, 2010, May 21, 2010, June 4, 2010, June 9, 2010, June 9, 2010, June 14, 2010, June 17, 2010, July 9, 2010, August 25, 2010, September 15, 2010, September 21, 2010, October 1, 2010, October 13, 2010, October 21, 2010, October 22, 2010, November 4, 2010, November 9, 2010 (excluding the matters in Item 2.02 and Exhibit 99.1 therein, which are not incorporated by reference herein), December 3, 2010, December 22, 2010, December 27, 2010, December 29, 2010, January 10, 2011, January 12, 2011, February 2, 2011, February 9, 2011 and February 16, 2011 and

4. The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on July 13, 1995 and February 6, 2004.

Furthermore, all reports and other documents subsequently filed (but not furnished) by us with the SEC pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 prior to the termination of this offering shall be deemed to be incorporated by reference in this prospectus supplement and to be a part of this prospectus supplement from the date of filing of such reports and documents. We are not incorporating by reference any documents or portions thereof that are not deemed "filed" with the SEC, including information “furnished” pursuant to Items 2.02 or 7.01 of Form 8-K. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus supplement modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

This prospectus supplement and the accompanying prospectus are only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus supplement and the accompanying prospectus. Statements contained in this prospectus supplement as to the contents of any contract or other document are qualified by reference to the copy of that contract or document filed as an exhibit to the registration statement or that will be filed as an exhibit to the current report on Form 8-K upon completion of this offering.

Each person to whom a copy of this prospectus supplement is delivered may request a copy of any or all of the information incorporated by reference in this prospectus supplement, including the exhibits to any filings incorporated by reference herein, from us, at no charge, or from the Securities and Exchange Commission in the above described manner.

$150,000,000

Discovery Laboratories, Inc.

Debt Securities, Preferred Stock, Common Stock,
Debt Warrants and Equity Warrants

We may sell from time to time in one or more offerings up to $150,000,000 in the aggregate of:

- our secured or unsecured debt securities, in one or more series, which may be either senior, senior subordinated or subordinated debt securities;
- shares of our preferred stock in one or more series;
- shares of our common stock;
- debt warrants;
- equity warrants; and
- any combination of the foregoing.

When we decide to sell particular securities, we will provide you with the specific terms and the public offering price of the securities we are then offering in one or more prospectus supplements to this prospectus. The prospectus supplement may add to, change or update information contained in this prospectus. The prospectus supplement may also contain important information about U.S. federal income tax consequences. You should carefully read this prospectus, together with any prospectus supplements and information incorporated by reference in this prospectus and any prospectus supplements, before you decide to invest. **This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.**

Our common stock is quoted on The NASDAQ Capital Market® under the trading symbol "DSCO." Any common stock sold pursuant to this prospectus or any prospectus supplement will be listed on that exchange, subject to official notice of issuance. Each prospectus supplement to this prospectus will contain information, where applicable, as to any other listing on any national securities exchange of the securities covered by the prospectus supplement.

Investing in our securities involves significant risks. See "Risk Factors" beginning on page 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is June 11, 2010.

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This prospectus is part of a registration statement we filed with the Securities and Exchange Commission. You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with additional or different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front of the prospectus.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC") utilizing a "shelf" registration process or continuous offering process, which allows us to offer and sell any combination of the securities described in this prospectus in one or more offerings. Using this prospectus, we may offer up to a total dollar amount of $150,000,000 of these securities.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities pursuant to this registration statement and the prospectus contained herein, we will provide a prospectus supplement that will contain specific information about the terms of that offering. That prospectus supplement may include additional risk factors about us and the terms of that particular offering. Prospectus supplements may also add to, update or change the information contained in this prospectus. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in such prospectus supplement. In addition, as we describe in the section entitled "Where You Can Find More Information," we have filed and plan to continue to file other documents with the SEC that contain information about us and the business conducted by us and our subsidiaries. Before you decide whether to invest in any of these securities, you should read this prospectus, the prospectus supplement that further describes the offering of these securities and the information we file with the SEC.

In this prospectus and any prospectus supplement, unless otherwise indicated, the terms "Discovery", "the Company", "we", "us" and "our" refer and relate to Discovery Laboratories, Inc., and its consolidated subsidiaries.

ABOUT DISCOVERY

Discovery Laboratories, Inc. (referred to as "we," "us," or the "Company") is a biotechnology company developing surfactant therapies to treat respiratory disorders and diseases for which there frequently are few or no approved therapies. Our novel KL 4 proprietary technology produces a synthetic, peptide-containing surfactant (KL 4 surfactant) that is structurally similar to pulmonary surfactant, a substance produced naturally in the lung and essential for survival and normal respiratory function. In addition, our proprietary capillary aerosol-generating technology (capillary aerosolization technology) produces a dense aerosol with a defined particle size, to potentially deliver our aerosolized KL 4 surfactant to the lung. As many respiratory disorders are associated with surfactant deficiency or surfactant degradation, we believe that our proprietary technology platform makes it possible, for the first time, to develop a significant pipeline of surfactant products targeted to treat a wide range of previously unaddressed respiratory problems.

We are developing our lead products, Surfaxin®(lucinactant), Surfaxin LS™ and Aerosurf®, to address the most significant respiratory conditions affecting pediatric populations. Our research and development efforts are currently focused on the management of Respiratory Distress Syndrome (RDS) in premature infants. We have filed a New Drug Application (NDA) for our first product based on our novel KL 4 surfactant technology, Surfaxin for the prevention of RDS in premature infants, and received a Complete Response Letter from the U.S. Food and Drug Administration (FDA) in April 2009. To potentially resolve the sole remaining Chemistry, Manufacturing and Controls (CMC) issue regarding the fetal rabbit Biological Activity Test (BAT, an important quality control release and stability test) that must be addressed to gain Surfaxin approval, in May, we completed optimization and revalidation of the BAT, which successfully met all pre-specified acceptance criteria. We are currently conducting a series of prospectively-designed, side-by-side preclinical studies employing both the newly-optimized and revalidated BAT and the well-established preterm lamb model of RDS. We expect to be able to assess study data, on a somewhat limited basis, as analysis of the different batches is completed, beginning in the fourth quarter of 2010, and potentially complete the preclinical program late in the fourth quarter 2010. We believe that we remain on target to submit a Complete Response in the first quarter of 2011. We believe that the RDS market represents a significant opportunity from both a medical and a business perspective. We further believe that Surfaxin, Surfaxin LS and Aerosurf, have the potential to greatly improve the management of RDS and, collectively, represent the opportunity, over time, to significantly expand the current RDS worldwide annual market.

In addition to our lead products, we plan over time to develop our KL4 surfactant technology into a broad product pipeline that potentially will address a variety of debilitating respiratory conditions for which there currently are no or few approved therapies, in patient populations ranging from premature infants to adults. We have recently completed enrollment in and released preliminary top line results for a Phase 2 clinical trial of Surfaxin to potentially address Acute Respiratory Failure (ARF). Our KL 4 surfactant is also the subject of an investigator-initiated Phase 2a clinical trial assessing the safety, tolerability and short-term effectiveness (via improvement in mucociliary clearance) of aerosolized KL 4 surfactant in patients with Cystic Fibrosis (CF). We are conducting research and preclinical development with our KL 4 surfactant potentially to address Acute Lung Injury (ALI), and, potentially in the future, other diseases associated with inflammation of the lung, such as Asthma and Chronic Obstructive Pulmonary Disease (COPD). We have also initiated exploratory preclinical studies to assess the feasibility of using our KL 4 surfactant in combination with small and large molecule therapeutics to efficiently and effectively deliver therapies to the lung to treat a range of pulmonary conditions and disease.

An important priority is to secure strategic and financial resources to potentially maximize the inherent value of our KL4 surfactant technology. We prefer to accomplish our objectives through strategic alliances, including potential business alliances, commercial and development partnerships. With respect to our lead products, we continue to engage in discussions with potential strategic and/or financial partners. In addition, our plans include potentially taking our early stage exploratory programs through a Phase 2 proof-of-concept phase and, if successful, thereafter determining whether to seek strategic alliances or collaboration arrangements or to utilize other financial alternatives to fund their further development. To secure required capital, we are also considering other alternatives, including additional financings and other similar opportunities. Although securing strategic partners and capital to support our research and development activities is a key priority, there can be no assurance that any strategic alliance will be successfully identified or other financing alternatives will be successfully concluded. Until such time as we secure the necessary capital, we plan to continue conserving our financial resources, predominantly by limiting investments in our pipeline programs.

We have focused our current resources on our lead products, primarily to address the requirements to gain the potential approval of Surfaxin for the prevention of RDS in premature infants in the United States. Until such time as we secure sufficient strategic and financial resources to support the continuing development of our KL 4 surfactant technology and support our operations, we will continue to conserve our resources, predominantly by curtailing and pacing investments in our pipeline programs.

Corporate Information

Surfaxin® and Aerosurf™ are our trademarks. This prospectus also includes product names, trademarks and trade names of other companies, which names are the exclusive property of the holders thereof.

We maintain our principal offices and research at 2600 Kelly Road, Suite 100, Warrington, Pennsylvania. Our telephone number is 215-488-9300. Our website address is www.discoverylabs.com. Information contained in our web site is not a part of this prospectus. Our common stock is listed on The NASDAQ Capital Market, where our symbol is DSCO.

RISK FACTORS

An investment in our common stock involves significant risks. You should carefully consider the risks described below or in any applicable prospectus supplement and other information, including our financial statements and related notes previously included in our periodic reports filed with the SEC, and in the documents incorporated therein by reference before deciding to invest in our securities. The risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. The following risks, among others, could cause our actual results, performance, achievements or industry results to differ materially from those expressed in our forward-looking statements contained herein and presented elsewhere by management from time to time. If any of the following risks actually occurs, our business prospects, financial condition or results of operations could be materially harmed. In such case, the market price of our securities would likely and you could lose all or part of your investment.

We may not successfully develop and market our products, and even if we do, we may not become profitable.

We currently have no products approved for marketing and sale and are conducting research and development on our product candidates. As a result, we have not begun to market or generate revenues from the commercialization of any of our products. Our long-term viability will be impaired if we are unable to obtain regulatory approval for, or successfully market, our product candidates. Even if we successfully develop and gain regulatory approval for our products, we still may not generate sufficient or sustainable revenues or we may not become profitable.

To date, we have generated revenues primarily from investments, research grants and collaboration agreements. We need to continue to engage in significant, time-consuming and costly research, development, pre-clinical studies, clinical testing and regulatory approval activities for our products under development before we can commercialize them. In addition, after making significant investments, the development, pre-clinical or clinical studies may show that our products are not effective or safe for one or more of their intended uses. We may fail in the development and commercialization of our products.

As of December 31, 2009, we have an accumulated deficit of approximately $357.6 million and we expect to continue to incur significant increasing operating losses over the next several years. As a result of our financial position as of December 31, 2009, the audit opinion we received from our independent auditors, which is included in our financial statements in our annual report on Form 10-K for the year ended December 31, 2009, contained a notation related to our ability to continue as a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. Our ability to continue as a going concern is dependent on our ability to raise additional capital, to fund our research and development and commercial programs and meet our obligations on a timely basis. If we are unable to successfully raise sufficient additional capital, through strategic alliances and other financing alternatives, we will likely not have sufficient cash flow and liquidity to fund our business operations, forcing us to curtail our activities and, ultimately, potentially cease operations. Even if we are able to raise additional capital, such financings may only be available on unattractive terms, or could result in significant dilution of stockholders' interests and, in such event, the market price of our common stock may decline.

In addition, we may face significant challenges if conditions in the global financial markets do not significantly improve, including an inability to access the capital markets at a time when we would like or require, and an increased cost of capital. Except for our Committed Equity Financing Facilities (CEFFs) (which are subject to certain limitations), we currently do not have arrangements to obtain additional financing. Any such financing could be difficult to obtain or only available on unattractive terms and could result in significant dilution of stockholders' interests. In any such event, the market price of our common stock may decline. In addition, failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our business plan, financial performance and stock price and could delay new product development and clinical trial plans.

The regulatory approval process for our products is expensive and time-consuming and the outcome is uncertain. We may not obtain required regulatory approvals for the commercialization of our products.

To test, make and sell our products under development, including Surfaxin, we must receive regulatory approvals for each product. The FDA and foreign regulators, such as the EMEA, extensively and rigorously regulate the testing, manufacture, distribution, advertising, pricing and marketing of drug products. This approval process includes (i) preclinical studies and clinical trials of each drug product candidate and active pharmaceutical ingredient to establish its safety and effectiveness, and (ii) confirmation by the FDA and foreign regulators that we maintain good laboratory and manufacturing practices during testing and manufacturing. Even if favorable data are generated by clinical trials, the FDA or foreign regulator may not accept or approve an NDA or MAA filed for a drug product on a timely basis or at all.

In particular, we filed an NDA with the FDA for Surfaxin for the prevention of RDS in premature infants. On April 17, 2009, we received a Complete Response Letter for this NDA. We met with the FDA in June 2009 and September 2009 to discuss proposals for resolving the sole remaining Chemistry, Manufacturing, Control (CMC) issue regarding our fetal rabbit Biological Activity Test (BAT, an important quality and release test for Surfaxin). We have continued to have communications with the FDA to develop a program to resolve the remaining issue identified in the April 2009 Complete Response Letter. In May, we completed the initial phase of a comprehensive preclinical program in which we optimized and revalidated the BAT, which successfully met all pre-specified acceptance criteria. We are currently executing the second phase of a comprehensive preclinical program, consisting of a series of prospectively-designed, side-by-side preclinical studies employing our optimized and revalidated BAT and the well-established preterm lamb model of RDS. The FDA indicated that, to gain approval of Surfaxin, data generated from the preterm lamb model and BAT studies must demonstrate the same relative changes in respiratory compliance between both models over time. We expect to be able to assess study data, on a somewhat limited basis, as analysis of the different batches is completed, beginning in the fourth quarter of 2010, and potentially complete the preclinical program late in the fourth quarter 2010. We believe that we remain on target to submit a Complete Response in the first quarter of 2011. Even if the FDA is satisfied with the results of our efforts to optimize and revalidate the BAT, the FDA may not be satisfied with the results of our side-by-side studies or, may interpret the data in a different manner such that, ultimately, the FDA may not approve Surfaxin for the prevention of RDS in premature infants. Any failure to secure FDA approval or further delay associated with the FDA's review process with respect to Surfaxin could potentially delay or prevent the approval of our other products and would have a material adverse effect on our business.

Even assuming that we gain regulatory approval to market our drugs, if the FDA and foreign regulators later withdraw their approval or otherwise restrict marketing, our business would be materially harmed.

The FDA and foreign regulators have not yet approved any of our products under development for marketing in the United States or elsewhere. Without regulatory approval, we will not be able to market our products. Even if we were to succeed in gaining regulatory approvals for any of our products, the FDA or a foreign regulator could at any time withdraw any approvals granted if there is a later discovery of previously unidentified problems or if we fail to comply with other applicable regulatory requirements at any stage in the regulatory process, or the FDA or a foreign regulator may restrict or delay our marketing of a product or force us to make product recalls. In addition, the FDA could impose other sanctions such as fines, injunctions, civil penalties or criminal prosecutions. Any withdrawal of our regulatory approval or significant restriction on our ability to market our products after approval would have a material adverse effect on our business.

The April 2009 Complete Response Letter and the resulting delay in our gaining approval of Surfaxin have caused us to make fundamental changes in our business strategy, which now focuses on securing strategic alliances, and take additional steps to conserve our financial resources, which may subject us to unanticipated risks and uncertainties.

Following receipt of the April 2009 Complete Response Letter from the FDA, to conserve our cash resources, we implemented cost containment measures and reduced our workforce.

Because of the delay in our gaining approval of Surfaxin, we also made fundamental changes in our business strategy. To secure capital and develop and, if approved, commercialize our KL 4 surfactant pipeline programs and products, we are now seeking to enter into strategic alliances, development agreements or other collaboration arrangements in all markets, including the United States, and are reviewing various other financial alternatives that would provide infusions of capital and other resources needed to advance our KL 4 respiratory pipeline programs and meet our capital requirements and continue our operations. In April 2010, we restructured our loan with PharmaBio Development Inc. (PharmaBio), a former investment subsidiary of Quintiles Transnational Corp. (Quintiles), and, as a result, we paid approximately $6.6 million of the loan and extended the maturity of the remaining $4 million, $2 million of which is now due and payable on July 31, 2010 and the balance on September 30, 2010. As part of the restructuring, PharmaBio invested $2 million to purchase approximately 4.1 million shares of our common stock and also agreed to negotiate in good faith to potentially enter into a strategic arrangement under which PharmaBio would provide funding for a research collaboration between Quintiles and us relating to the possible research and development, and commercialization of two of our drug product candidates, Surfaxin LS and Aerosurf, for the prevention and treatment of RDS in premature infants. However, neither party is obligated to enter into any such arrangement. Although we continue to consider potential opportunities, there can be no assurance that any strategic alliance or other financing alternatives will be successfully concluded.

Assuming that we are able to identify strategic partners and secure such strategic alliances, our ability to execute our current operating plan will be dependent on numerous factors, including, the performance of third-party strategic partners and collaborators with whom we may contract. Under these arrangements, our partners may control key decisions relating to the development, and assuming approval, commercialization, of our products. The rights of our partners would limit our flexibility in considering development strategies and in the alternatives for the commercialization of our products. In addition, if we breach or terminate our strategic alliance agreements or if our strategic partners otherwise fail to conduct their activities in a timely manner, or if there is a dispute about our respective obligations, we may need to seek other partners or we may have to develop our own internal sales and marketing capabilities to commercialize our products in the United States. If we fail to successfully develop these relationships, or if we or our partners fail to successfully develop or commercialize any of our products, it may delay or prevent us from developing or commercializing our products in a competitive and timely manner and would have a material adverse effect on the commercialization of our products.

For example, our collaboration arrangement with Esteve for Surfaxin and certain other of our drug product candidates is focused on key southern European markets. If we or Esteve should fail to conduct our respective collaboration-related activities in a timely manner, or otherwise breach or terminate the agreements that make up our collaboration arrangements, or if a dispute should arise under our collaboration arrangements, such events could impair our ability to commercialize or develop our products for the Esteve territory in Europe. In that event, we may need to seek other partners and collaboration arrangement, or we may have to develop our own internal capabilities to market the covered products in the Esteve territory without a collaboration arrangement.

As we continue to manage our cash resources and work towards securing potential strategic alliances, we have also reassessed the level of investment and the pace of our research and development programs, including for Aerosurf, BPD, ARF and new formulations of our KL 4 surfactant, including Surfaxin LS. Reductions in investment will cause us to experience delays in the progress of some of our programs. Also, as we reassess our regulatory position and financial resources, at any time we may implement additional and potentially significant changes to our development plans and our operations as we seek to strengthen our financial and operational position. Such changes, if adopted, could prove to be disruptive and detrimental to our development programs. Moreover, consideration and planning of such strategic changes diverts management's attention and other resources from day-to-day operations, which may subject us to further risks and uncertainties.

Our research and development activities involve significant risks and uncertainties that are inherent in the clinical development and regulatory approval processes.

Development risk factors include, but are not limited to, whether we, or our third-party collaborators, drug substances and materials suppliers and third-party contract manufacturers, will be able to:

- complete our pre-clinical and clinical trials of our KL4 surfactant product candidates with scientific results that are sufficient to support further development and regulatory approval;
- receive the necessary regulatory approvals;
- obtain adequate supplies of surfactant active drug substances, manufactured to our specifications and on commercially reasonable terms;
- perform under agreements to supply drug substances, medical device components and related services necessary to manufacture our KL 4 surfactant product candidates, including Surfaxin, Surfaxin LS and Aerosurf;
- resolve to the FDA's satisfaction the matters identified in the April 2009 Complete Response Letter for Surfaxin for the prevention of RDS in premature infants;
- provide for sufficient manufacturing capabilities, at our manufacturing operations in Totowa and with third-party contract manufacturers, to produce sufficient drug product, including Surfaxin, Surfaxin LS and capillary aerosolization systems to meet our pre-clinical and clinical development requirements;
- successfully implement a strategy for the development and manufacture of capillary aerosolization systems and related materials to support clinical studies of Aerosurf; and
- obtain capital necessary to fund our research and development efforts, including our supportive operations, manufacturing and clinical trials requirements.

Because these factors, many of which are outside our control, could have a potentially significant impact on our development activities, the success, timing of completion and ultimate cost of development of any of our product candidates is highly uncertain and cannot be estimated with any degree of certainty. The timing and cost to complete drug trials alone may be impacted by, among other things:

- slow patient enrollment;
- long treatment time required to demonstrate effectiveness;
- lack of sufficient clinical supplies and material;
- adverse medical events or side effects in treated patients;
- lack of compatibility with complementary technologies;
- failure of a drug product candidate to demonstrate effectiveness; and
- lack of sufficient funds.

If we do not successfully complete clinical trials, we will not receive regulatory approval to market our KL4 surfactant products. Failure to obtain and maintain regulatory approval and generate revenues from the sale of our products would have a material adverse effect on our financial condition and results of operations and likely reduce the market value of our common stock.

Our ongoing clinical trials may be delayed, or fail, which will harm our business.

Clinical trials generally take two to five years or more to complete. Like many biotechnology companies, even after obtaining promising results in earlier trials or in preliminary findings for such clinical trials, we may suffer significant setbacks in late-stage clinical trials. Data obtained from clinical trials are susceptible to varying interpretations that may delay, limit or prevent regulatory approval. In addition, we may be unable to enroll patients quickly enough to meet our expectations for completing any or all of these trials. The timing and completion of current and planned clinical trials of our product candidates depend on many factors, including the rate at which patients are enrolled. Delays in patient enrollment in clinical trials may occur, which would be likely to result in increased costs, program delays, or both.

Patient enrollment is a function of many factors, including:

- the number of clinical sites;
- the size of the patient population;
- the proximity of patients to the clinical sites;
- the eligibility and enrollment criteria for the study;
- the willingness of patients or their parents or guardians to participate in the clinical trial;
- the existence of competing clinical trials;
- the existence of alternative available products; and
- geographical and geopolitical considerations.

If we succeed in achieving our patient enrollment targets, patients that enroll in our clinical trials could suffer adverse medical events or side effects that are known, such as a decrease in the oxygen level of the blood upon administration, or currently unknown to us. It is also possible that the FDA or foreign regulators could interrupt, delay or halt any one or more of our clinical trials for any of our product candidates. If we or any regulator believe that trial participants face unacceptable health risks, any one or more of our trials could be suspended or terminated. We also may not reach agreement with the FDA or a foreign regulator on the design of any one or more of the clinical studies necessary for approval. Conditions imposed by the FDA and foreign regulators on our clinical trials could significantly increase the time required for completion of such clinical trials and the costs of conducting the clinical trials.

In addition to our efforts to gain approval of Surfaxin for the prevention of RDS in premature infants, we have recently completed and released preliminary top line results for a Phase 2 clinical trial to evaluate the use of Surfaxin in children up to two years of age suffering from Acute Respiratory Failure and our aerosolized KL 4 surfactant is the subject of an investigator-initiated Phase 2a trial assessing the safety, tolerability and short-term effectiveness of aerosolized KL 4 surfactant in patients with CF. We are also planning to initiate clinical studies in support of certain of our other products in our KL 4 surfactant technology pipeline. All of these clinical trials will be time-consuming and potentially costly. Should we fail to complete our clinical development programs or should such programs yield unacceptable results, such failures would have a material adverse effect on our business.

The manufacture of our drug products is a highly exacting and complex process, and if we, our contract manufacturers or any of our materials suppliers encounter problems manufacturing our products or the drug substances used to make our products, this could potentially cause us to delay development or clinical programs or, following approval, product launch, or cause us to experience shortages of products inventories.

The manufacture of pharmaceutical products requires significant expertise and compliance with strictly enforced federal, state and foreign regulations. We, our contract manufacturers or our materials and drug substances suppliers may experience manufacturing or quality control problems that could result in a failure to maintain compliance with the FDA's cGMP requirements, or those of foreign regulators, which is necessary to continue manufacturing our drug products, materials or drug substances. Other problems that may be encountered include:

- the need to make necessary modifications to qualify and validate a facility;
- difficulties with production and yields, including manufacturing and completing all required release testing on a timely basis to meet demand;
- availability of raw materials and supplies;
- quality control and assurance;
- casualty damage to a facility; and
- shortages of qualified personnel.

Such a failure could result in product production and shipment delays or an inability to obtain materials or drug substance supplies.

Manufacturing or quality control problems have in the past occurred and may again occur at our Totowa, New Jersey facility, or may occur at the facilities of a contract manufacturer of our drug substances and materials suppliers. Such problems may require potentially complex, time-consuming and costly comprehensive investigations to determine the root causes of such problems and may also require detailed and time-consuming remediation efforts, which can further delay a return to normal manufacturing and production activities. Any failure by our own manufacturing operations or by the manufacturing operations of any of our suppliers to comply with cGMP requirements or other FDA or similar foreign regulatory requirements could adversely affect our ability to manufacture our drug products, which in turn would adversely affect our clinical research activities and our ability to develop and gain regulatory approval to market our drug products.

We manufacture our own drug products at our facility in Totowa, New Jersey. We currently do not have a back-up facility. Any interruption in manufacturing operations at this location could result in shortage of drug supply for planned preclinical experiments and clinical trials, and, if approved, commercial requirements for Surfaxin. A number of factors could cause interruptions, including:

- equipment malfunctions or failures;
- technology malfunctions;
- work stoppages or slowdowns;
- damage to or destruction of the facility;
- regional power shortages; and
- product tampering.

To assure adequate drug supplies and continued compliance with cGMP and other FDA or foreign regulatory requirements, we own certain specialized manufacturing equipment, employ experienced manufacturing senior executive and managerial personnel, and continue to invest in enhanced quality systems and manufacturing capabilities. However, we do not have fully-redundant systems and equipment to respond promptly in the event of a significant loss at our manufacturing operations. We may under certain conditions be unable to produce Surfaxin and our other KL 4 surfactant product candidates at the required volumes or to appropriate standards, if at all. If we are unable to successfully develop and maintain our manufacturing capabilities and at all times comply with cGMP, it will adversely affect our clinical development activities and, potentially, the sales of our products, if approved.

If we fail to identify or maintain relationships with our manufacturers, assemblers and integrator of our capillary aerosolization systems or subcomponents, the timeline of our plans for the development and, if approved, commercialization of Aerosurf could suffer.

In connection with the development of the drug-device combination aerosol formulation of our KL4 surfactant technology, including Aerosurf, we currently plan to rely on third-party contract manufacturers to manufacture and assemble the subcomponents of our capillary aerosolization technology and to assemble and integrate the component parts to support our preclinical experiments, planned clinical studies and potential commercialization of Aerosurf. Certain of these components must be manufactured in an environmentally-controlled area and, when assembled, the critical drug product-contact components and patient interface systems must be packaged and sterilized. Each of the aerosolization system devices must be quality-control tested prior to release and monitored for conformance to designated product specification.

We have identified component manufacturers and an integrator to manufacture and integrate our initial prototype capillary aerosolization system that we plan to use in Phase 2 clinical trials. However, as with many device development initiatives, there is a risk that these manufacturers and integrator may not be able to manufacture and integrate the subcomponents of our capillary aerosolization systems to our specified standards. In addition, we may not be able to identify qualified additional or replacement manufacturers and integrators to manufacture subcomponents and integrate our current prototype or next generation and later development versions of our capillary aerosolization systems or we may not be able to enter into agreements with them on terms and conditions favorable and acceptable to us. In addition, the manufacturers and assemblers and integrators that we identify may be unable to timely comply with FDA, or other foreign regulatory agency, requirements. If we do not successfully identify and enter into contractual agreements with, manufacturers, assemblers and integrators that have the required expertise, it will adversely affect our timeline for the development and, if approved, commercialization of Aerosurf.

If the parties we depend on for supplying our active drug substances, materials and excipients as well as manufacturing-related services do not timely supply these products and services, it may delay or impair our ability to develop, manufacture and market our products.

We rely on suppliers for our active drug substances, materials and excipients, and third parties for certain manufacturing-related services to manufacture drug product that meets appropriate content, quality and stability standards for use in clinical trials and, if approved, for commercial distribution. Our ability to manufacture depends upon receiving adequate supplies and related services, which may be difficult or uneconomical to procure. The manufacturing process for Aerosurf, a combination drug-device product, includes the integration of a number of component parts, many of which are comprised of a large number of subcomponent parts that we expect will be produced by potentially a large number of manufacturers. We and our suppliers may not be able to (i) produce our drug substances, or manufacture materials and excipients or our drug product, or capillary aerosolization systems subcomponent parts or integrated devices, to appropriate standards for use in clinical studies, (ii) comply with manufacturing specifications under any definitive manufacturing, supply or services agreements with us, or (iii) maintain relationships with our suppliers and service providers for a sufficient time to successfully produce and market our product candidates.

In some cases, we are dependent upon a single supplier to provide all of our requirements for one or more of our drug substances, materials and excipients or one or more of our drug product device subcomponents, components and subassemblies. If we do not maintain manufacturing and service relationships that are important to us and are not able to identify a replacement supplier or vendor or develop our own manufacturing capabilities, our ability to obtain regulatory approval for our products could be impaired or delayed and our costs could substantially increase,. Even if we are able to find replacement manufacturers, suppliers and vendors when needed, we may not be able to enter into agreements with them on terms and conditions favorable to us or there could be a substantial delay before such manufacturer, vendor or supplier, or a related new facility is properly qualified and registered with the FDA or other foreign regulatory authorities. Such delays could have a material adverse effect on our development activities and our business.

Under our restructured license agreement with PMUSA/PMPSA, we now have rights to develop the capillary aerosolization technology, which will require us to build internal development capabilities or enter into future collaborations or other arrangements to gain the engineering expertise required to support our development activities.

In March 2008, we restructured a strategic alliance with Philip Morris USA, Inc. (PMUSA) d/b/a/ Chrysalis and assumed full responsibility for development of the capillary aerosolization technology. We now license our capillary aerosolization technology from PMUSA in the United States and certain U.S. territories and from a former PMUSA affiliate, Philip Morris Products S.A. (PMPSA) elsewhere in the world. We currently plan to rely on our own engineering expertise as well as design engineers, medical device experts and other third-party collaborators to advance the development of our capillary aerosolization technology.

Our development activities are subject to certain risks and uncertainties, including, without limitation:

- To develop the capillary aerosolization technology, we will require access to sophisticated engineering capabilities. To meet that requirement, we have assembled our own internal medical device engineering expertise and plan to work with a leading engineering and design firm that has a successful track record of developing innovative devices for major companies in the medical and pharmaceutical industries. There is no assurance that our efforts will be successful. If we are unable to identify design engineers and medical device experts to support our development efforts, including the initial prototype aerosolization system and the next generation versions of the capillary aerosolization systems, it would impair our ability to commercialize or develop our aerosolized KL 4 surfactant products.

- To advance the development of our capillary aerosolization technology, we will require additional capital and expect to seek a strategic partner or third-party collaborator to provide financial support and the necessary medical device development expertise. There can be no assurance, however, that we will successfully identify or be able to enter into agreements with such potential partners or collaborators on terms and conditions that are favorable to us. If we are unable to secure the necessary medical device development expertise to support our development program, this could impair our ability to commercialize or develop our aerosolized KL 4 surfactant.

The realization of any of the foregoing risks would have a material adverse effect on our business.

To market, sell and distribute our products, we plan to enter into distribution arrangements and marketing alliances, which could require us to give up rights to our drug product candidates.

We have limited experience in marketing or selling pharmaceutical products and have a limited marketing and sales team. To market, sell and distribute our products, we may rely on third-party distributors to distribute, or enter into marketing alliances to sell, our products, both internationally and in the United States. We may not be successful in identifying such third parties or finalizing such arrangements on terms and conditions that are favorable to us. Our failure to successfully enter into these arrangements on favorable terms could delay or impair our ability to commercialize our drug product candidates and could increase our costs of commercialization. Our dependence on distribution arrangements and marketing alliances to commercialize our drug product candidates will subject us to a number of risks, including:

- we may be required to relinquish important rights to our products or drug product candidates;
- we may not be able to control the amount and timing of resources that our distributors or collaborators may devote to the commercialization of our drug product candidates;
- our distributors or collaborators may experience financial difficulties;
- our distributors or collaborators may not devote sufficient time to the marketing and sales of our products thereby exposing us to potential expenses in terminating such distribution agreements; and
- business combinations or significant changes in a collaborator's business strategy may adversely affect a collaborator's willingness or ability to complete its obligations under any arrangement.

If we fail to enter into arrangements with third parties in a timely manner or if such parties fail to perform, it could adversely affect sales of our products. We and our third-party distributors and collaborators must also market our products in compliance with federal, state and local laws related to providing incentives and inducements. Violation of these laws can result in substantial penalties.

We intend to market and sell Surfaxin, if approved, through one or more strategic partners or other collaborators. We currently have such an alliance with Esteve for distribution of our KL 4 surfactant products in Andorra, Greece, Italy, Portugal and Spain. We have limited influence over the decisions made by Esteve or its sublicensees or the resources that they may devote to the marketing and distribution of Surfaxin products in their licensed territory, and Esteve or its sublicensees may not meet their obligations in this regard. Our marketing and distribution arrangement with Esteve may not be successful, and, as a result, we may not receive any revenues from it. Also, we may not be able to enter into marketing and sales agreements for Surfaxin on acceptable terms, if at all, in territories not covered by the Esteve agreement, or for any of our other drug product candidates.

The commercial success of our product candidates will depend upon the degree of market acceptance by physicians, patients, healthcare payers and others in the medical community.

Any potential products that we bring to market may not gain or maintain market acceptance by governmental purchasers, group purchasing organizations, physicians, patients, healthcare payers and others in the medical community. If any products that we develop do not achieve an adequate level of acceptance, we may not generate sufficient revenues to support continued commercialization of these products. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the perceived safety and efficacy of our products;
- the potential advantages over alternative treatments;
- the prevalence and severity of any side effects;
- the relative convenience and ease of administration;
- cost effectiveness;
- the willingness of the target patient population to try new products and of physicians to prescribe our products;
- the effectiveness of our marketing strategy and distribution support; and
- the sufficiency of coverage or reimbursement by third parties.

If we do not adequately forecast customer demand for our product candidates, including Surfaxin, if approved, our business could suffer.

The timing and amount of customer demand and the commercial requirements to meet changing customer demand are difficult to predict. If we are successful in gaining regulatory approval of our products, we may not be able to accurately forecast customer demand for our drug product candidates, including Surfaxin, or respond effectively to unanticipated increases in demand. This could have an adverse effect on our business. If we overestimate customer demand, or attempt to commercialize products for which the market is smaller than we anticipate, we could incur significant unrecoverable costs from creating excess capacity.

We will require significant additional capital to continue our planned research and development activities and continue to operate as a going concern. Moreover, such additional financing could result in equity dilution.

Until such time as we are able to commercialize any of our lead products, if approved, and generate revenues, we will need substantial additional funding to conduct our ongoing research and product development activities and continue to operate as a going concern. Our operating plans require that we make prudent investments in preclinical studies and our drug product and device development programs, and focus our resources on being in a position to initiate key clinical programs only after we have secured strategic and financial alternatives needed to provide the necessary capital. We would prefer to accomplish our objectives through strategic alliances. If we are unable to raise substantial additional funds through strategic alliances or other alternatives, including potentially, future debt and equity financings, we may be forced to further limit many, if not all, of our programs, which could have a material adverse impact on our business plan. In the meantime, as we attempt to conserve our financial resources, we may experience additional delays in certain of our development programs.

The terms of our indebtedness may impair our ability to conduct our business.

Our capital requirements have been funded in part by the loan from PharmaBio, with respect to which we completed a restructuring on April 28, 2010. Under the restructuring, we paid in cash $6.6 million of the total outstanding ($10.6 million at the time of restructuring), representing $4.5 million in outstanding principal and approximately $2.1 million in accrued interest. Of the remaining $4 million principal amount under the loan, $2 million will now be due and payable on July 30, 2010 and the balance of $2 million will be due and payable on September 30, 2010. If we make our payments on time, no further interest will accrue on the outstanding principal amount. The PharmaBio loan is secured by substantially all of our assets, including our proprietary technologies, and contains a number of covenants and restrictions that, with certain exceptions, restrict our ability to, among other things, incur additional indebtedness, borrow money or issue guarantees, use assets as security in other transactions, and sell assets to other companies. In connection with the restructuring we agreed to an additional covenant to maintain (i) at least $10 million in cash and cash equivalents until payment of the first $2 million installment is made on or before July 30, 2010, and (ii) at least $8 million in cash and cash equivalents until the payment of the second $2 million installment on or before September 30, 2010, after which the PharmaBio loan will be paid in full. In order to comply with these cash covenants and to have sufficient working capital to make payment of the remaining principal amount and continue operate our business, we will likely need to secure sources of additional capital. If we are unable to secure additional sources of capital, we will be forced to further reduce our cash outflows and limit our investments in our research and development programs. If we fail to comply with the cash covenants required under the restructuring, PharmaBio would have the right to declare all borrowings to be immediately due and payable. If we are unable to pay when due amounts owed to PharmaBio, whether at maturity or in connection with acceleration of the loan following a default, PharmaBio would have the right to proceed against the collateral securing the indebtedness.

Under the restructuring, PharmaBio agreed to negotiate in good faith to potentially enter into a strategic arrangement under which PharmaBio would provide funding for a research collaboration between Quintiles and us relating to the possible research and development, and commercialization of two of our drug product candidates, Surfaxin LS and Aerosurf, for the prevention and treatment of RDS in premature infants. However, neither party is obligated to enter into any such arrangement and there can be no assurances that any such arrangement will be completed or that we will be successful in securing the additional capital required to continue our operations.

We have financed certain acquisitions of personal property, machinery and equipment through an equipment financing facility with GE Business Financial Services Inc. and a loan from the Commonwealth of Pennsylvania, Department of Community and Economic Development, Machinery and Equipment Loan Fund (MELF). As of December 31, 2009, an aggregate of $1.0 million was outstanding under the facility and the loan. If we were unable to pay our creditors when due amounts owed, they would have the right to proceed against the collateral securing the debt.

If we require additional funds to support our capital programs, there can be no assurance that we will be able to secure a lender that will be willing to provide us funding or that we will be able to secure additional funding through the MELF or other program of the Commonwealth. In addition, the aggregate amount of our indebtedness may adversely affect our financial condition, limit our operational and financing flexibility and negatively impact our business.

Our Committed Equity Financing Facilities may become unavailable to us if we do not comply with their conditions.

If we are unable to meet the conditions provided under the CEFFs, we will not be able to issue any portion of the shares potentially available for issuance under the CEFFs and therefore may not be able to use the CEFFs to fund our activities, and the CEFFs could expire without being fully utilized. Moreover, Kingsbridge Capital Limited, the CEFF provider, has the right under certain circumstances to terminate the CEFFs, including in the event of a material adverse event. In addition, even if we meet all the conditions provided under the CEFFs, we are dependent upon the financial ability of Kingsbridge to perform its obligations and purchase shares of our common stock under the CEFFs. Any inability on our part to use at least one of the CEFFs or any failure by Kingsbridge to perform its obligations under the CEFFs could have a material adverse effect upon us.

The market price of our stock may be adversely affected by market volatility.

The market price of our common stock, like that of many other development stage pharmaceutical or biotechnology companies, has been and is likely to be volatile. In addition to general economic, political and market conditions, the price and trading volume of our stock could fluctuate widely in response to many factors, including:

- announcements of the results of clinical trials by us or our competitors;
- patient adverse reactions to drug products;
- governmental approvals, delays in expected governmental approvals or withdrawals of any prior governmental approvals or public or regulatory agency concerns regarding the safety or effectiveness of our products;
- changes in the United States or foreign regulatory policy during the period of product development;
- changes in the United States or foreign political environment and the passage of laws, including tax, environmental or other laws, affecting the product development business;
- developments in patent or other proprietary rights, including any third party challenges of our intellectual property rights;
- announcements of technological innovations by us or our competitors;
- announcements of new products or new contracts by us or our competitors;
- actual or anticipated variations in our operating results due to the level of development expenses and other factors;

- changes in financial estimates by securities analysts and whether our earnings meet or exceed the estimates;
- conditions and trends in the pharmaceutical and other industries;
- new accounting standards; and
- the occurrence of any of the risks described in these "Risk Factors" or in our Annual Report on Form 10-K for the year ended December 31, 2009 or our other public filings.

Our common stock is listed for quotation on The NASDAQ Capital Market. During the twelve month period ended December 31, 2009, the price of our common stock ranged from $0.33 to $2.40. We expect the price of our common stock to remain volatile. The average daily trading volume in our common stock varies significantly. For the twelve month period ended December 31, 2009, the average daily trading volume in our common stock was approximately 3,586,958 shares and the average number of transactions per day was approximately 4,621. The instability observed in our daily volume and number of transactions per day may affect the ability of our stockholders to sell their shares in the public market at prevailing prices.

In the past, following periods of volatility in the market price of the securities of companies in our industry, securities class action litigation has often been instituted against companies in our industry. Even if securities class actions that we may face in the future are ultimately determined to be meritless or unsuccessful, they involve substantial costs and a diversion of management attention and resources, which could negatively impact our business.

If we are unable to regain compliance with the Minimum Bid Price Requirement of The NASDAQ Capital Market prior to November 29, 2010, our stock price may decline and our common stock may be subject to delisting from Nasdaq. If our stock were no longer listed on Nasdaq, the liquidity of our securities would be impaired.

Effective June 4, 2010, our common stock listing was transferred from The NASDAQ Global Market® to The NASDAQ Capital Market ® .. All companies listed on The NASDAQ Capital Market must meet certain financial requirements and adhere to Nasdaq's corporate governance standards.

As previously disclosed, on December 2, 2009, we had received a delisting notification from The NASDAQ Global Market indicating that our common stock had failed to close at or above $1.00 per share for more than 30 consecutive trading days and, as a result, we were not in compliance with Nasdaq Listing Rule 5450(a)(1), the minimum bid price rule. The delisting notification also granted us 180 calendar days, or until June 1, 2010, to regain compliance with the minimum bid price rule.

As our common stock did not close at or above $1.00 per share for 10 consecutive trading days within the grace period provided, we filed an application to transfer the listing of our common stock from The NASDAQ Global Market to The NASDAQ Capital Market. In connection with the transfer to The NASDAQ Capital Market, Nasdaq on June 2, 2010 notified us that it has granted us an additional 180 calendar days, or until November 29, 2010, to regain compliance with the minimum bid price rule, which would require at a minimum that our common stock close at or above $1.00 for at least 10 consecutive trading days prior to November 29, 2010.

If compliance is not regained, Nasdaq will notify us of its determination to delist our common stock, which decision may be appealed to a Nasdaq Listing Qualifications Panel. There can be no assurances that such an appeal would be successful. If our common stock were no longer listed on The NASDAQ Capital Market, investors might only be able to trade in the over-the-counter market in the Pink Sheets ® (a quotation medium operated by Pink OTC Markets Inc.) or on the OTC Bulletin Board ® of the Financial Industry Regulatory Authority, Inc. (FINRA). This would impair the liquidity of our securities not only in the number of shares that could be bought and sold at a given price, which might be depressed by the relative illiquidity, but also through delays in the timing of transactions and reduction in media coverage.

Future sales and issuances of our common stock or rights to purchase our common stock, including pursuant to our CEFFs, stock incentive plans and upon the exercise of outstanding securities exercisable for shares of our common stock, could result in substantial additional dilution of our stockholders, cause our stock price to fall and adversely affect our ability to raise capital.

We require significant additional capital to continue to execute our business plan and advance our research and development efforts. To the extent that we raise additional capital through the issuance of additional equity securities and through the exercise of outstanding warrants, our stockholders may experience substantial dilution. We may sell shares of our common stock in one or more transactions at prices that may be at a discount to the then-current market value of our common stock and on such other terms and conditions as we may determine from time to time. Any such transaction could result in substantial dilution of our existing stockholders. If we sell shares of our common stock in more than one transaction, stockholders who purchase our common stock may be materially diluted by subsequent sales. Such sales could also cause a drop in the market price of our common stock. The issuance of shares of our common stock under the CEFFs has, and the issuance of shares upon exercise of the related warrants we issued to Kingsbridge will have, a dilutive impact on our other stockholders and the issuance, or even potential issuance, of such shares could have a negative effect on the market price of our common stock. In addition, if we access the CEFFs, we will issue shares of our common stock to Kingsbridge at a discount (from 4.375% to 17.5%, depending upon the market price and which CEFF is used) to the daily volume weighted average price of our common stock on each trading day, which will further dilute the interests of other stockholders. Furthermore, to the extent that Kingsbridge sells to third parties the shares of our common stock that we sell to Kingsbridge under the CEFFs, our stock price may decrease due to the additional selling pressure in the market. The perceived risk of dilution from sales of stock to or by Kingsbridge may cause holders of our common stock to sell their shares, or it may encourage short sales of our common stock or other similar transactions. This could contribute to a decline in the stock price of our common stock.

We filed the universal shelf registration statement to which this prospectus relates with the SEC on Form S-3 (File No. 333-151654) on June 13, 2008 (which was declared effective shortly thereafter) for the proposed offering from time to time of up to $150 million of our securities, including common stock, preferred stock, varying forms of debt and warrant securities, or any combination of the foregoing. We have issued securities pursuant to this shelf registration statement on three prior occasions, including in February and April 2010, and plan to do so again in the future in response to market conditions or other circumstances on terms and conditions that will be determined at such time.

As of May 31, 2010, we had 158,064,779 shares of common stock issued and outstanding. In addition, as of May 31, 2010, approximately (i) 27.8 million shares of our common stock were reserved for potential issuance upon the exercise of outstanding warrants, (ii) 17.6 million shares of our common stock were reserved for issuance pursuant to our equity incentive plans, and (iii)367,928 shares of our common stock were reserved for issuance pursuant to our 401(k) Plan. The exercise of stock options and other securities could cause our stockholders to experience substantial dilution. Moreover, holders of our stock options and warrants are likely to exercise them, if ever, at a time when we otherwise could obtain a price for the sale of our securities that is higher than the exercise price per security of the options or warrants. Such exercises, or the possibility of such exercises, may impede our efforts to obtain additional financing through the sale of additional securities or make such financing more costly. It may also reduce the price of our common stock.

If, during the term of certain of our warrants, we declare or make any dividend or other distribution of our assets to holders of shares of our common stock, by way of return of capital or otherwise (including any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement or other similar transaction), then the exercise price of such warrants may adjust downward and the number of shares of common stock issuable upon exercise of such warrants would increase. As a result, we may be required to issue more shares of common stock than previously anticipated, which could result in further dilution of our existing stockholders.

Directors, executive officers and beneficial owners of more than five percent of our capital stock own a significant percentage of our capital stock, and they may make decisions that you do not consider to be in your best interest.

As of March 31, 2010, our directors, executive officers and beneficial owners of more than five percent (5%) of our issued and outstanding common stock, beneficially owned, in the aggregate, approximately fifteen percent (15%) of the issued and outstanding shares of our common stock. As a result, if some or all of them acted together, they would have the ability to exert substantial influence over the election of our Board of Directors and the outcome of issues requiring approval by our stockholders. This concentration of ownership may have the effect of delaying or preventing a change in control of our company that may be favored by other stockholders. This could prevent transactions in which stockholders might otherwise recover a premium for their shares over current market prices.

Our technology platform is based solely on our proprietary KL4 surfactant technology and capillary aerosolization technology.

Our technology platform is based on the scientific rationale of using our KL4 surfactant technology and capillary aerosolization technology to treat life-threatening respiratory disorders and to serve as the foundation for the development of novel respiratory therapies and products. Our business is dependent upon the successful development and approval of our drug product candidates and our drug-device combination products based on these technologies. Any material problems with our technology platforms could have a material adverse effect on our business.

If we cannot protect our intellectual property, other companies could use our technology in competitive products. Even if we obtain patents to protect our products, those patents may not be sufficiently broad or they may expire and others could then compete with us.

We seek patent protection for our drug product candidates to prevent others from commercializing equivalent products in substantially less time and at substantially lower expense. The pharmaceutical industry places considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Our success will depend in part on our ability and that of parties from whom we license technology to successfully obtain patents, defend our patents and otherwise prevent others from infringing our proprietary rights, including our trade secrets.

The patent position of companies relying upon biotechnology is highly uncertain and involves complex legal and factual questions for which important legal principles are unresolved. To date, the United States Patent and Trademark Office (USPTO) has not adopted a consistent policy regarding the breadth of claims that it will allow in biotechnology patents or the degree of protection that these types of patents afford. As a result, there are risks that we may not secure rights to products or processes that appear to be patentable.

We and the parties licensing technologies to us, have filed various United States and foreign patent applications with respect to the products and technologies under our development, and the USPTO and foreign patent offices have issued patents with respect to our products and technologies. These patent applications include international applications filed under the Patent Cooperation Treaty. Our pending patent applications, those we may file in the future or those we may license from third parties may not result in the USPTO or foreign patent office issuing patents. In addition, if patent rights covering our products are not sufficiently broad, they may not provide us with sufficient proprietary protection or competitive advantages against competitors with similar products and technologies. Furthermore, even if the USPTO or foreign patent offices were to issue patents to us or our licensors, others may challenge the patents or circumvent the patents, or the patent office or the courts may invalidate the patents. Thus, any patents we own or license from or to third parties may not provide us any protection against competitors.

The patents that we hold also have a limited life. We have licensed a series of patents for our KL4 surfactant technology from Johnson & Johnson and its wholly-owned subsidiary Ortho Pharmaceutical Corporation (Ortho Pharmaceutical), which are important, both individually and collectively, to our strategy of commercializing our KL 4 surfactant products. These patents, which include important KL 4 composition of matter claims and relevant European patents, began to expire in November 2009, and will expire on various dates ending in 2017 or, in some cases, possibly later. Of the patents that have expired, we have filed to extend our most important patent one year, with further extensions possible into 2014. For our aerosolized KL 4 surfactant, we hold exclusive licenses in the United States and outside the United States to PMUSA's capillary aerosolization technology for use with pulmonary surfactants for all respiratory diseases. Our exclusive license in the United States also extends to other (non-surfactant) drugs to treat a wide range of pediatric and adult respiratory indications in hospitals and other health care institutions. The capillary aerosolization technology patents expire on various dates beginning in May 2016 and ending in 2023, or, in some cases, possibly later. We have filed, and when possible and appropriate, will file, other patent applications with respect to our products and processes in the United States and in foreign countries. We may not be able to develop enhanced or additional products or processes that will be patentable under patent law and, if we do enhance or develop additional products that we believe are patentable, additional patents may not be issued to us. See also, "– If we cannot meet requirements under our license agreements, we could lose the rights to our products."

Intellectual property rights of third parties could limit our ability to develop and market our products.

Our commercial success also depends upon our ability to operate our business without infringing the patents or violating the proprietary rights of others. In certain cases, the USPTO keeps United States patent applications confidential while the applications are pending. As a result, we cannot determine in advance what inventions third parties may claim in their pending patent applications. We may need to defend or enforce our patent and license rights or to determine the scope and validity of the proprietary rights of others through legal proceedings, which would be costly, unpredictable and time consuming. Even in proceedings where the outcome is favorable to us, they would likely divert substantial resources, including management time, from our other activities. Moreover, any adverse determination could subject us to significant liability or require us to seek licenses that third parties might not grant to us or might only grant at rates that diminish or deplete the profitability of our products. An adverse determination could also require us to alter our products or processes or cease altogether any product sales or related research and development activities.

If we cannot meet requirements under our license agreements, we could lose the rights to our products.

We depend on licensing agreements with third parties to maintain the intellectual property rights to our products under development. Presently, we have licensed rights from Johnson & Johnson, Ortho Pharmaceutical, PMUSA and PMPSA. These agreements require us to make payments and satisfy performance obligations to maintain our rights under these licensing agreements. All of these agreements last either throughout the life of the patents or for a number of years after the first commercial sale of the relevant product.

In addition, we are responsible for the cost of filing and prosecuting certain patent applications and maintaining certain issued patents licensed to us. If we do not meet our obligations under our license agreements in a timely manner, we could lose the rights to our proprietary technology.

Finally, we may be required to obtain licenses to patents or other proprietary rights of third parties in connection with the development and use of our products and technologies. Licenses required under any such patents or proprietary rights might not be made available on terms acceptable to us, if at all.

We rely on confidentiality agreements that could be breached and may be difficult to enforce.

Although we take what we believe to be reasonable steps to protect our intellectual property, including the use of agreements relating to the non-disclosure of our confidential information to third parties, as well as agreements that provide for disclosure and assignment to us of all rights to the ideas, developments, discoveries and inventions of our employees and consultants while we employ them, such agreements can be difficult and costly to enforce. We generally seek to enter into these types of agreements with consultants, advisors and research collaborators; however, to the extent that such parties apply or independently develop intellectual property in connection with any of our projects, disputes may arise concerning allocation of the related proprietary rights. Such disputes often involve significant expense and yield unpredictable results. In addition, we also rely on trade secrets and proprietary know-how that we seek to protect, in part, through confidentiality agreements with our employees, consultants, advisors or others.

Despite the protective measures we employ, we still face the risk that:

- agreements may be breached;
- agreements may not provide adequate remedies for the applicable type of breach;
- our trade secrets or proprietary know-how may otherwise become known;
- our competitors may independently develop similar technology; or
- our competitors may independently discover our proprietary information and trade secrets.

We depend upon key employees and consultants in a competitive market for skilled personnel. If we are unable to attract and retain key personnel, it could adversely affect our ability to develop and market our products.

We are highly dependent upon the members of our executive management team and our directors, as well as our scientific advisory board members, consultants and collaborating scientists. Many of these people have been involved with us for many years, have played integral roles in our progress and we believe that they continue to provide value to us. A loss of any of our key personnel may have a material adverse effect on aspects of our business and clinical development and regulatory programs.

In August 2009, Robert J. Capetola, Ph.D., resigned his position with us as President and Chief Executive Officer and a member of our Board of Directors. Our Board elected W. Thomas Amick, our Chairman of the Board, to act as Chief Executive Officer on an interim basis. Mr. Amick, who is otherwise employed by another biotech company as its Chief Executive Officer, is able to devote only a portion of his time to his duties as our Chief Executive Officer. Until such time as we employ a full-time Chief Executive Officer, our dependency on the remaining members of our management team to exhibit strong leadership skills and effectively manage our operations is increased. While we expect that, once we have secured sufficient strategic and financial resources to support the continuing development of our KL 4 surfactant technology and support our operations, we will seek to attract candidates to lead our management team, there can be no assurances that we will be successful in that endeavor.

As of December 31, 2009, we had employment agreements with 12 officers that expired in May 2010. These agreements provided for automatic one-year renewal at the end of each term, unless otherwise terminated by either party. In February 2010, we provided notice of non-renewal with respect to all but the agreements that we maintain with the following officers: Chief Financial Officer, General Counsel, and the senior officers in charge of Manufacturing, Corporate Development, and Human Resources. The employment of the officers whose agreements was not renewed were not terminated and they remain as at-will employees and, in lieu of the benefits previously provided under their employment agreements, will be entitled to certain severance benefits. The loss of services from these executives could significantly adversely affect our ability to develop and market our products and obtain necessary regulatory approvals.

Our future success also will depend in part on the continued service of our key scientific and management personnel and our ability to identify, hire and retain additional personnel. We may experience intense competition for qualified personnel and the existence of non-competition agreements between prospective employees and their former employers may prevent us from hiring those individuals or subject us to lawsuits brought by their former employers. While we attempt to provide competitive compensation packages to attract and retain key personnel, many of our competitors have greater resources and more experience than we, making it difficult for us to compete successfully for key personnel.

Our industry is highly competitive and we have less capital and resources than many of our competitors, which may give them an advantage in developing and marketing products similar to ours or make our products obsolete.

Our industry is highly competitive and subject to rapid technological innovation and evolving industry standards. We compete with numerous existing companies intensely in many ways. We intend to market our products under development for the treatment of diseases for which other technologies and treatments are rapidly developing and, consequently, we expect new companies to enter our industry and that competition in the industry will increase. Many of these companies have substantially greater research and development, manufacturing, marketing, financial, technological, personnel and managerial resources than we have. In addition, many of these competitors, either alone or with their collaborative partners, have significantly greater experience than we do in:

- developing products;
- undertaking preclinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals or products; and
- manufacturing and marketing products.

Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA or comparable foreign approval or commercializing products before us. If we commence commercial product sales, we will compete against companies with greater marketing and manufacturing capabilities that may successfully develop and commercialize products that are more effective or less expensive than ours. These are areas in which, as yet, we have limited or no experience. In addition, developments by our competitors may render our drug product candidates obsolete or noncompetitive.

We also face, and will continue to face, competition from colleges, universities, governmental agencies and other public and private research organizations. These competitors frequently aggressively seek patent protection and licensing arrangements to collect royalties for use of technology that they have developed. Some of these technologies may compete directly with the technologies that we are developing. These institutions will also compete with us in recruiting highly qualified scientific personnel. We expect that therapeutic developments in the areas in which we are active may occur at a rapid rate and that competition will intensify as advances in this field are made. As a result, we need to continue to devote substantial resources and efforts to research and development activities.

If product liability claims are brought against us, it may result in reduced demand for our products or damages that exceed our insurance coverage and we may incur substantial costs.

The clinical testing, marketing and use of our products exposes us to product liability claims if the use or misuse of our products causes injury, disease or results in adverse effects. Use of our products in clinical trials, as well as commercial sale, if approved, could result in product liability claims. In addition, sales of our products through third party arrangements could also subject us to product liability claims. We presently carry product liability insurance with annual coverage of up to $10 million per occurrence and $10 million in the aggregate. However, this insurance coverage includes various deductibles, limitations and exclusions from coverage, and in any event might not fully cover any potential claims. We may need to obtain additional product liability insurance coverage, including by locally-authorized insurers licensed in countries where we conduct our clinical trials, before initiating clinical trials. We expect to obtain product liability insurance coverage before commercializing any of our drug product candidates; however, such insurance is expensive and may not be available when we need it.

In the future, we may not be able to obtain adequate insurance, with acceptable limits and retentions, at an acceptable cost. Any product liability claim, even one that is within the limits of our insurance coverage or one that is meritless and/or unsuccessful, could adversely affect the availability or cost of insurance generally and our cash available for other purposes, such as research and development. In addition, such claims could result in:

- uninsured expenses related to defense or payment of substantial monetary awards to claimants;
- a decrease in demand for our drug product candidates;
- damage to our reputation; and
- an inability to complete clinical trial programs or to commercialize our drug product candidates, if approved.

Moreover, the existence of a product liability claim could affect the market price of our common stock.

Our corporate compliance program cannot ensure that we are in compliance with all applicable laws and regulations affecting our activities in the jurisdictions in which we may sell our products, if approved, and a failure to comply with such regulations or prevail in litigation related to noncompliance could harm our business.

Many of our activities, including the research, development, manufacture, sale and marketing of our products, are subject to extensive laws and regulation, including without limitation, health care "fraud and abuse" laws, such as the federal false claims act, the federal anti-kickback statute, and other state and federal laws and regulations. We have developed and implemented a corporate compliance policy and oversight program based upon what we understand to be current industry best practices, but we cannot assure you that this program will protect us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such investigations, actions or lawsuits are instituted against us, and if we are not successful in defending or disposing of them without liability, such investigations, actions or lawsuits could result in the imposition of significant fines or other sanctions and could otherwise have a significant impact on our business.

We expect to face uncertainty over reimbursement and healthcare reform.

In both the United States and other countries, sales of our products will depend in part upon the availability of reimbursement from third-party payers, which include governmental health administration authorities, managed care providers and private health insurers. Third party payers increasingly challenge the price and examine the cost effectiveness of medical products and services. Moreover, the current political environment in the United States and abroad may result in the passage of significant legislation that could, among other things, restructure the markets in which we operate and restrict pricing strategies of drug development companies. If, for example, price restrictions were placed on the distribution of our drugs, we may be forced to curtail development of our pipeline products and this could have a material adverse effect on our business, results of operations and financial condition. Even if we succeed in commercializing our drug products, uncertainties regarding health care policy, legislation and regulation, as well as private market practices, could affect our ability to sell our products in quantities or at prices that will enable us to achieve profitability.

To obtain reimbursement from a third party payer, it must determine that our drug product is a covered benefit under its health plan, which is likely to require a determination that our product is:

- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining a determination that a product is a covered benefit may be a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data about our products to each payer. We may not be able to provide sufficient data to gain coverage.

Even when a payer determines that a product is covered, the payer may impose limitations that preclude payment for some uses that are approved by the FDA or other regulatory authorities. Moreover, coverage does not imply that any product will be covered in all cases or that reimbursement will be available at a rate that would permit a health care provider to cover its costs of using our product.

Provisions of our Restated Certificate of Incorporation, as amended, our Amended and Restated By-Laws, our Shareholder Rights Agreement and Delaware law could defer a change of our management and thereby discourage or delay offers to acquire us.

Provisions of our Amended and Restated Certificate of Incorporation, as amended, our Amended and Restated By-Laws, our Shareholder Rights Agreement and Delaware law may make it more difficult for someone to acquire control of us or for our stockholders to remove existing management, and might discourage a third party from offering to acquire us, even if a change in control or in management would be beneficial to our stockholders. For example, our Restated Certificate of Incorporation, as amended, allows us to issue shares of preferred stock without any vote or further action by our stockholders. Our Board of Directors has the authority to fix and determine the relative rights and preferences of preferred stock. Our Board of Directors also has the authority to issue preferred stock without further stockholder approval. As a result, our Board of Directors could authorize the issuance of a series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock and the right to the redemption of the shares, together with a premium, before the redemption of our common stock. In addition, our Board of Directors, without further stockholder approval, could issue large blocks of preferred stock. We have adopted a Shareholder Rights Agreement, which under certain circumstances would significantly impair the ability of third parties to acquire control of us without prior approval of our Board of Directors thereby discouraging unsolicited takeover proposals. The rights issued under the Shareholder Rights Agreement would cause substantial dilution to a person or group that attempts to acquire us on terms not approved in advance by our Board of Directors.

The failure to prevail in litigation or the costs of litigation, including securities class action and patent claims, could harm our financial performance and business operations.

We are potentially susceptible to litigation. For example, as a public company, we may be subject to claims asserting violations of securities laws. Even if such actions are found to be without merit, the potential impact of such actions, which generally seek unquantified damages and attorneys' fees and expenses, is uncertain. There can be no assurance that an adverse result in any future proceeding would not have a potentially material adverse effect on our business, results of operations and financial condition.

We have from time to time been involved in disputes and proceedings arising in the ordinary course of business, including in connection with the conduct of clinical trials. Such claims, with or without merit, if not resolved, could be time-consuming and result in costly litigation. Although we believe such claims are unlikely to have a material adverse effect on our financial condition or results of operations, it is impossible to predict with certainty the eventual outcome of such claims and there can be no assurance that we will be successful in any proceeding to which we may be a party.

In addition, as the USPTO keeps United States patent applications confidential in certain cases while the applications are pending, we cannot ensure that our products or methods do not infringe upon the patents or other intellectual property rights of third parties. As the biotechnology and pharmaceutical industries expand and more patents are applied for and issued, the risk increases that our patents or patent applications for our KL 4 surfactant product candidates may give rise to a declaration of interference by the USPTO, or to administrative proceedings in foreign patent offices, or that our activities lead to claims of patent infringement by other companies, institutions or individuals. These entities or persons could bring legal proceedings against us seeking to invalidate our patents, obtain substantial damages or enjoin us from conducting research and development activities.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein and therein, including in "Risk Factors," contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The forward-looking statements are only predictions and provide our current expectations or forecasts of future events and financial performance and may be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "will" or "should" or, in each case, their negative, or other variations or comparable terminology, though the absence of these words does not necessarily mean that a statement is not forward-looking. Forward-looking statements include all matters that are not historical facts and include, without limitation statements concerning: our business strategy, outlook, objectives, future milestones, plans, intentions, goals, and future financial condition, including the period of time for which our existing resources will enable us to fund our operations; plans regarding our efforts to gain U.S. regulatory approval for our lead product, Surfaxin® (lucinactant) for the prevention of Respiratory Distress Syndrome in premature infants; the possibility, timing and outcome of submitting regulatory filings for our products under development; our research and development programs for our KL 4 surfactant technology and our capillary aerosolization technology platform, including planning for and timing of any clinical trials and potential development milestones; the development of financial, clinical, manufacturing and distribution plans related to the potential commercialization of our drug products, if approved; and plans regarding potential strategic alliances and other collaborative arrangements with pharmaceutical companies and others to develop, manufacture and market our products.

We intend that all forward-looking statements be subject to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are subject to many risks and uncertainties that could cause actual results to differ materially from any future results expressed or implied by the forward-looking statements. We caution you therefore against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Examples of the risks and uncertainties include, but are not limited to:

- risks related generally to our efforts to gain regulatory approval, in the United States and elsewhere, for our drug product candidates, including our lead products that we are developing to address Respiratory Distress Syndrome (RDS) in premature infants: Surfaxin ® (lucinactant) for the prevention of RDS, Surfaxin LS™ (our lyophilized KL 4 surfactant) and Aerosurf ® (our initial aerosolized KL 4 surfactant);

- the risk that we and the U.S. Food and Drug Administration (FDA) or other regulatory authorities will not be able to agree on matters raised during the regulatory review process, or that we may be required to conduct significant additional activities to potentially gain approval of our product candidates, if ever;

- the risk that the FDA or other regulatory authorities may not accept, or may withhold or delay consideration of, any applications that we may file, or may not approve our applications or may limit approval of our products to particular indications or impose unanticipated label limitations;

- risks relating to the rigorous regulatory approval processes, including pre-filing activities, required for approval of any drug or combination drug-device products that we may develop, whether independently, with strategic development partners or pursuant to collaboration arrangements;

- the risk that the FDA will not be satisfied with the results of either our efforts to optimize and revalidate the BAT or the side-by-side studies that we are conducting as part of our comprehensive preclinical program to address the open CMC issue, which is needed to gain regulatory approval for Surfaxin and advance our KL 4 surfactant pipeline;

- the risk that changes in the national or international political and regulatory environment may make it more difficult to gain FDA or other regulatory approval of our drug product candidates;

- risks relating to our research and development activities, which involve time-consuming and expensive preclinical studies and other efforts, and potentially multiple clinical trials, which may be subject to potentially significant delays or regulatory holds, or which may fail, and which must be conducted using sophisticated and extensive analytical methodologies, including an acceptable biological activity test, if required, as well as other quality control release and stability tests to satisfy the requirements of the regulatory authorities;

- risks relating to our ability to develop and manufacture drug products and drug-device combination products based on our capillary aerosolization technology for clinical studies and, if approved, for commercialization of our products;

- risks relating to the transfer of our manufacturing technology to third-party contract manufacturers and assemblers;

- the risk that we, our contract manufacturers or any of our third-party suppliers may encounter problems or delays in manufacturing or assembling drug products, drug product substances, capillary aerosolization devices and related components and other materials on a timely basis or in an amount sufficient to support our development efforts and, if our products are approved, commercialization;

- the risk that we may be unable to identify potential strategic partners or collaborators with whom we can develop and, if approved, commercialize our products in a timely manner, if at all;

- the risk that we or our strategic partners or collaborators will not be able to attract or maintain qualified personnel;

- the risk that, if approved, market conditions, the competitive landscape or otherwise may make it difficult to launch and profitably sell our products;

- the risk that we may not be able to raise additional capital or enter into strategic alliances or collaboration agreements (including strategic alliances for development or commercialization of our drug products and combination drug-device products);

- risks that the unfavorable credit environment will adversely affect our ability to fund our activities, that our share price will fall below the price level necessary for us to access capital under our new Committed Equity Financing Facility (CEFF) (as of June 7, 2010, it is below the level necessary to access our previous two CEFFs), that our previous two CEFFs may expire before we are able to access the full dollar amount potentially available thereunder, and that additional equity financings could result in substantial equity dilution;

- the risk that we will be unable to regain compliance with the minimum bid price requirement of The NASDAQ Capital Market by November 29, 2010, or maintain compliance with the other listing requirements of The NASDAQ Capital Market, which could cause our stock to be delisted from Nasdaq and cause our stock price to decline;

- the risk that recurring losses, negative cash flows and the inability to raise additional capital could threaten our ability to continue as a going concern;

- the risks that we may be unable to maintain and protect the patents and licenses related to our products and that other companies may develop competing therapies and/or technologies;

- the risk that we may become involved in securities, product liability and other litigation;

- risks related to reimbursement and health care reform that may adversely affect us;

- the risk that the FDA may not approve Surfaxin® or may subject the marketing of Surfaxin ® to onerous requirements that significantly impair marketing activities;

- the risk that we may identify unforeseen problems that have not yet been discovered or the FDA could in the future impose additional requirements to gain approval of Surfaxin ® ; and

- other risks and uncertainties detailed in “Risk Factors” and in the documents incorporated by reference in this prospectus.

Pharmaceutical and biotechnology companies have suffered significant setbacks in advanced clinical trials, even after obtaining promising earlier trial results. Data obtained from such clinical trials are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. After gaining approval of a drug product, pharmaceutical companies face considerable challenges in marketing and distributing their products, and may never become profitable.

The forward-looking statements contained in this prospectus or the documents incorporated by reference herein speak only of their respective dates. Factors or events that could cause our actual results to differ may emerge from time to time and it is not possible for us to predict them all. Except to the extent required by applicable laws, rules or regulations, we do not undertake to publicly announce revisions to any of the forward-looking statements in this prospectus or the documents incorporated by reference herein or therein, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

Except as described in any prospectus supplement or post-effective amendment, we will retain broad discretion over the use of the net proceeds from the sale of our securities offered hereby and the net proceeds from the sales of securities offered by this prospectus will be used to meet working capital requirements for: (i) development of our SRT pipeline programs, including Surfaxin, life cycle development of Surfaxin for other respiratory conditions prevalent in the Neonatal Intensive Care Unit (NICU) and Pediatric Intensive Care Unit (PICU), and Aerosurf for neonatal and pediatric conditions; (ii) efforts intended to gain regulatory approval to market and sell, and preparing for the potential commercial launch in the United States of, Surfaxin for the prevention of RDS in premature infants; (iii) continued investment in our quality systems and manufacturing capabilities to meet the anticipated pre-clinical, clinical and potential future commercial requirements of Surfaxin, Aerosurf and our other SRT products; and (iv) seeking collaboration agreements and strategic partnerships in the international and domestic markets for the development and potential commercialization of our neonatal and pediatric pipeline for Surfaxin and Aerosurf™ and for the development and potential commercialization of our SRT for respiratory conditions and disorders affecting adult patients. We expect, from time to time, to evaluate the acquisition of businesses, products and technologies for which a portion of the net proceeds may be used.

The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as the progress of our research and development efforts, technological advances and the competitive environment for Surfaxin and our other SRT drug candidates and their intended uses. Pending the application of the net proceeds, we intend to invest the proceeds in short-term, interest-bearing instruments or other investment-grade securities.

RATIO OF EARNINGS TO FIXED CHARGES

Our earnings were insufficient to cover fixed charges in each of the years in the five-year period ended December 31, 2009 and in the three-month period ended March 31, 2010. Our fixed charges do not include any dividend requirements with respect to preferred stock because, as of the date of this prospectus and for the five preceding fiscal years, we have had no preferred stock outstanding.

We compute the ratio of earnings to fixed charges by dividing (i) earnings (loss), which consists of net income from continuing operations before income taxes plus fixed charges and amortization of capitalized interest less interest capitalized during the period and adjusted for undistributed earnings in equity investments, by (ii) fixed charges, which consist of interest expense, capitalized interest and the interest portion of rental expense under operating leases estimated to be representative of the interest factor.

	Fiscal Year Ended December 31,					Three Months Ended March 31,
	2005	2006	2007	2008	2009	2010
	(in thousands)					
Ratio of earnings to fixed charges (1)						
Coverage deficiency	$ (58,904)	$ (46,333)	$ (40,005)	$ (39,106)	$ (30,240)	$ (7,288)

(1) Adjusted earnings, as described above, were insufficient to cover fixed charges in each period. We have not included a ratio of earnings to combined fixed charges and preferred stock dividends because we do not have any preferred stock outstanding.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities we offer under a prospectus supplement may differ from the terms we describe below. However, no prospectus supplement shall fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness. As of March 31, 2010, we had $ 11.4 million in outstanding indebtedness including accrued interest. This amount does not yet reflect the restructuring of our loan with PharmaBio on April 28, 2010, which is described in further detail under "Risk Factors — The terms of our indebtedness may impair our ability to conduct our business."

We will issue the senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue the subordinated debt securities under the subordinated indenture that we will enter into with the trustee named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement which includes this prospectus. We use the term “indentures” in this prospectus to refer to both the senior indenture and the subordinated indenture.

The indentures will be qualified under the Trust Indenture Act of 1939. We use the term “trustee” to refer to either the senior trustee or the subordinated trustee, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

Debt securities may be issued in separate series without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series.

We are not limited as to the amount of debt securities we may issue under the indentures. The prospectus supplement will set forth:

- whether the debt securities will be senior or subordinated;
- the offering price;
- the title;
- any limit on the aggregate principal amount;
- the person who shall be entitled to receive interest, if other than the record holder on the record date;
- the date the principal will be payable;
- the interest rate, if any, the date interest will accrue, the interest payment dates and the regular record dates;
- the place where payments may be made;
- any mandatory or optional redemption provisions;
- if applicable, the method for determining how the principal, premium, if any, or interest will be calculated by reference to an index or formula;

- if other than U.S. currency, the currency or currency units in which principal, premium, if any, or interest will be payable and whether we or the holder may elect payment to be made in a different currency;

- the portion of the principal amount that will be payable upon acceleration of stated maturity, if other than the entire principal amount;

- if the principal amount payable at stated maturity will not be determinable as of any date prior to stated maturity, the amount which will be deemed to be the principal amount;

- any defeasance provisions if different from those described below under “Satisfaction and Discharge; Defeasance;”

- any conversion or exchange provisions;

- any obligation to redeem or purchase the debt securities pursuant to a sinking fund;

- whether the debt securities will be issuable in the form of a global security;

- any subordination provisions, if different from those described below under “Subordinated Debt Securities;”

- any deletions of, or changes or additions to, the events of default or covenants; and

- any other specific terms of such debt securities.

Unless otherwise specified in the prospectus supplement:

- the debt securities will be registered debt securities; and

- registered debt securities denominated in U.S. dollars will be issued in denominations of $1,000 or an integral multiple of $1,000.

Debt securities may be sold at a substantial discount below their stated principal amount, bearing no interest or interest at a rate which at the time of issuance is below market rates.

Exchange and Transfer

Debt securities may be transferred or exchanged at the office of the security registrar or at the office of any transfer agent designated by us.

We will not impose a service charge for any transfer or exchange, but we may require holders to pay any tax or other governmental charges associated with any transfer or exchange.

In the event of any potential redemption of debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange, any debt security of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption and ending at the close of business on the day of the mailing; or

- register the transfer of or exchange any debt security of that series selected for redemption, in whole or in part, except the unredeemed portion being redeemed in part.

We may initially appoint the trustee as the security registrar. Any transfer agent, in addition to the security registrar, initially designated by us will be named in the prospectus supplement. We may designate additional transfer agents or change transfer agents or change the office of the transfer agent. However, we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

Global Securities

The debt securities of any series may be represented, in whole or in part, by one or more global securities. Each global security will:

- be registered in the name of a depositary that we will identify in a prospectus supplement;
- be deposited with the depositary or nominee or custodian; and
- bear any required legends.

No global security may be exchanged in whole or in part for debt securities registered in the name of any person other than the depositary or any nominee unless:

- the depositary has notified us that it is unwilling or unable to continue as depositary or has ceased to be qualified to act as depositary;
- an event of default is continuing; or
- any other circumstances described in a prospectus supplement.

As long as the depositary, or its nominee, is the registered owner of a global security, the depositary or nominee will be considered the sole owner and holder of the debt securities represented by the global security for all purposes under the indenture. Except in the above limited circumstances, owners of beneficial interests in a global security:

- will not be entitled to have the debt securities registered in their names,
- will not be entitled to physical delivery of certificated debt securities, and
- will not be considered to be holders of those debt securities under the indentures.

Payments on a global security will be made to the depositary or its nominee as the holder of the global security. Some jurisdictions have laws that require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to transfer beneficial interests in a global security.

Institutions that have accounts with the depositary or its nominee are referred to as “participants.” Ownership of beneficial interests in a global security will be limited to participants and to persons that may hold beneficial interests through participants. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants.

Ownership of beneficial interests in a global security will be shown on and effected through records maintained by the depositary, with respect to participants’ interests, or any participant, with respect to interests of persons held by participants on their behalf.

Payments, transfers and exchanges relating to beneficial interests in a global security will be subject to policies and procedures of the depositary.

The depositary policies and procedures may change from time to time. Neither we nor the trustee will have any responsibility or liability for the depositary’s or any participant’s records with respect to beneficial interests in a global security.

Payment and Paying Agent

The provisions of this paragraph will apply to debt securities unless otherwise indicated in the prospectus supplement. Payment of interest on a debt security on any interest payment date will be made to the person in whose name the debt security is registered at the close of business on the regular record date. Payment on debt securities of a particular series will be payable at the office of a paying agent or paying agents designated by us. However, at our option, we may pay interest by mailing a check to the record holder. The corporate trust office will be designated as our sole paying agent.

We may also name any other paying agents in the prospectus supplement. We may designate additional paying agents, change paying agents or change the office of any paying agent. However, we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

All moneys paid by us to a paying agent for payment on any debt security which remain unclaimed at the end of two years after such payment was due will be repaid to us. Thereafter, the holder may look only to us for such payment.

Consolidation, Merger and Sale of Assets

We may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to, any person, unless:

- the successor, if any, is a U.S. corporation, limited liability company, partnership, trust or other entity;
- the successor assumes our obligations on the debt securities and under the indenture;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- certain other conditions are met.

If the debt securities are convertible for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities which the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default

Unless we inform you otherwise in the prospectus supplement, the indenture will define an event of default with respect to any series of debt securities as one or more of the following events:

(1) failure to pay principal of or any premium on any debt security of that series when due and payable;

(2) failure to pay any interest on any debt security of that series when it becomes due and payable, and continuation of that failure for a period of 90 days (unless the entire amount of such payment is deposited by us with the trustee or paying agent prior to the expiration of the 90-day period);

(3) failure to deposit any sinking fund payment, when and as due in respect of any debt security of that series;

(4) failure to perform or breach of any other covenant or warranty by us in the indenture (other than a covenant or warranty that has been included in the indenture solely for the benefit of a series of debt securities other than the series), which failure continues uncured for a period of 90 days after we receive the notice required in the indenture;

(5) our bankruptcy, insolvency or reorganization; and

(6) any other event of default with respect to debt securities of that series that is described in the applicable prospectus supplement accompanying this prospectus.

An event of default of one series of debt securities is not necessarily an event of default for any other series of debt securities.

If an event of default, other than an event of default described in clause (5) above, shall occur and be continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding securities of that series may declare the principal amount of the debt securities of that series to be due and payable immediately.

If an event of default described in clause (5) above shall occur, the principal amount of all the debt securities of that series will automatically become immediately due and payable. Any payment by us on the subordinated debt securities following any such acceleration will be subject to the subordination provisions described below under "Subordinated Debt Securities."

After acceleration the holders of a majority in aggregate principal amount of the outstanding securities of that series may, under certain circumstances, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, or other specified amount, have been cured or waived.

Other than the duty to act with the required care during an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request of the holders unless the holders shall have offered to the trustee reasonable indemnity. Generally, the holders of a majority in aggregate principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee.

A holder will not have any right to institute any proceeding under the indentures, or for the appointment of a receiver or a trustee, or for any other remedy under the indentures, unless:

(1) the holder has previously given to the trustee written notice of a continuing event of default with respect to the debt securities of that series;

(2) the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made a written request and have offered reasonable indemnity to the trustee to institute the proceeding; and

(3) the trustee has failed to institute the proceeding and has not received direction inconsistent with the original request from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series within 90 days after the original request.

Holders may, however, sue to enforce the payment of principal, premium or interest on any debt security on or after the due date or to enforce the right, if any, to convert any debt security without following the procedures listed in (1) through (3) above.

We will furnish the trustee an annual statement by our officers as to whether or not we are in default in the performance of the indenture and, if so, specifying all known defaults.

Modification and Waiver

We and the trustee may make modifications and amendments to the indentures with the consent of the holders of a majority in aggregate principal amount of the outstanding securities of each series affected by the modification or amendment.

However, neither we nor the trustee may make any modification or amendment without the consent of the holder of each outstanding security of that series affected by the modification or amendment if such modification or amendment would:

- change the stated maturity of any debt security;
- reduce the principal, premium, if any, or interest on any debt security;
- reduce the principal of an original issue discount security or any other debt security payable on acceleration of maturity;
- reduce the rate of interest on any debt security;
- change the currency in which any debt security is payable;

- impair the right to enforce any payment after the stated maturity or redemption date;
- waive any default or event of default in payment of the principal of, premium or interest on any debt security;
- waive a redemption payment or modify any of the redemption provisions of any debt security;
- adversely affect the right to convert any debt security in any material respect; or
- change the provisions in the indenture that relate to modifying or amending the indenture.

Satisfaction and Discharge; Defeasance

We may be discharged from our obligations on the debt securities of any series that have matured or will mature or be redeemed within one year if we deposit with the trustee enough cash to pay all the principal, interest and any premium due to the stated maturity date or redemption date of the debt securities.

Each indenture will contain a provision that permits us to elect:

- to be discharged from all of our obligations, subject to limited exceptions, with respect to any series of debt securities then outstanding; and/or
- to be released from our obligations under the following covenants and from the consequences of an event of default resulting from a breach of these covenants: (1) the subordination provisions under a subordinated indenture; and (2) covenants as to payment of taxes and maintenance of corporate existence.

To make either of the above elections, we must deposit in trust with the trustee enough money to pay in full the principal, interest and premium on the debt securities. This amount may be made in cash and/or U.S. government obligations. As a condition to either of the above elections, we must deliver to the trustee an opinion of counsel that the holders of the debt securities will not recognize income, gain or loss for Federal income tax purposes as a result of the action.

If any of the above events occurs, the holders of the debt securities of the series will not be entitled to the benefits of the indenture, except for the rights of holders to receive payments on debt securities or the registration of transfer and exchange of debt securities and replacement of lost, stolen or mutilated debt securities.

Notices

Notices to holders will be given by mail to the addresses of the holders in the security register.

Governing Law

The indentures and the debt securities will be governed by, and construed under, the law of the State of New York.

Regarding the Trustee

The indentures will limit the right of the trustee, should it become a creditor of us, to obtain payment of claims or secure its claims.

The trustee will be permitted to engage in certain other transactions. However, if the trustee, acquires any conflicting interest, and there is a default under the debt securities of any series for which they are trustee, the trustee must eliminate the conflict or resign.

Subordinated Debt Securities

Payment on subordinated debt securities will, to the extent provided in the indenture, be subordinated in right of payment to the prior payment in full of all of our senior indebtedness. Subordinated debt securities also are effectively subordinated to all debt and other liabilities, including trade payables and lease obligations, if any, of our subsidiaries.

Upon any distribution of our assets upon any dissolution, winding up, liquidation or reorganization, the payment of the principal of and interest on subordinated debt securities will be subordinated in right of payment to the prior payment in full in cash or other payment satisfactory to the holders of senior indebtedness of all senior indebtedness. In the event of any acceleration of the subordinated debt securities because of an event of default, the holders of any senior indebtedness would be entitled to payment in full in cash or other payment satisfactory to such holders of all senior indebtedness obligations before the holders of subordinated debt securities are entitled to receive any payment or distribution. The indentures will require us or the trustee to promptly notify holders of designated senior indebtedness if payment of subordinated debt securities is accelerated because of an event of default.

We may not make any payment on subordinated debt securities, including upon redemption at the option of the holder of any subordinated debt securities or at our option, if:

- a default in the payment of the principal, premium, if any, interest, rent or other obligations in respect of designated senior indebtedness occurs and is continuing beyond any applicable period of grace, which is called a “payment default”; or

- a default other than a payment default on any designated senior indebtedness occurs and is continuing that permits holders of designated senior indebtedness to accelerate its maturity, and the trustee receives notice of such default, which is called a “payment blockage notice from us or any other person permitted to give such notice under the indenture, which is called a “non-payment default”.

We may resume payments and distributions on subordinated debt securities:

- in the case of a payment default, upon the date on which such default is cured or waived or ceases to exist; and

- in the case of a non-payment default, the earlier of the date on which such nonpayment default is cured or waived or ceases to exist and 179 days after the date on which the payment blockage notice is received by the trustee, if the maturity of the designated senior indebtedness has not been accelerated.

No new period of payment blockage may be commenced pursuant to a payment blockage notice unless 365 days have elapsed since the initial effectiveness of the immediately prior payment blockage notice and all scheduled payments of principal, premium and interest, including any liquidated damages, on the notes that have come due have been paid in full in cash. No non-payment default that existed or was continuing on the date of delivery of any payment blockage notice shall be the basis for any later payment blockage notice unless the non-payment default is based upon facts or events arising after the date of delivery of such payment blockage notice.

If the trustee or any holder of the notes receives any payment or distribution of our assets in contravention of the subordination provisions on subordinated debt securities before all senior indebtedness is paid in full in cash, property or securities, including by way of set-off, or other payment satisfactory to holders of senior indebtedness, then such payment or distribution will be held in trust for the benefit of holders of senior indebtedness or their representatives to the extent necessary to make payment in full in cash or payment satisfactory to the holders of senior indebtedness of all unpaid senior indebtedness.

In the event of our bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of subordinated debt securities may receive less, ratably, than our other creditors (including our trade creditors). This subordination will not prevent the occurrence of any event of default under the indenture.

Unless we inform you otherwise in the prospectus supplement, we will not be prohibited from incurring debt, including senior indebtedness, under any indenture relating to subordinated debt securities. We may from time to time incur additional debt, including senior indebtedness.

We are obligated to pay reasonable compensation to the trustee and to indemnify the trustee against certain losses, liabilities or expenses incurred by the trustee in connection with its duties relating to subordinated debt securities. The trustee’s claims for these payments will generally be senior to those of noteholders in respect of all funds collected or held by the trustee.

Certain Definitions

“indebtedness” means:

(1) all indebtedness, obligations and other liabilities for borrowed money, including overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, or evidenced by bonds, debentures, notes or similar instruments, other than any account payable or other accrued current liability or obligation incurred in the ordinary course of business in connection with the obtaining of materials or services;

(2) all reimbursement obligations and other liabilities with respect to letters of credit, bank guarantees or bankers’ acceptances;

(3) all obligations and liabilities in respect of leases required in conformity with generally accepted accounting principles to be accounted for as capitalized lease obligations on our balance sheet;

(4) all obligations and liabilities, contingent or otherwise, as lessee under leases for facility equipment (and related assets leased together with such equipment) and under any lease or related document (including a purchase agreement, conditional sale or other title retention or synthetic lease agreement) in connection with the lease of real property or improvement thereon (or any personal property included as part of any such lease) which provides that such Person is contractually obligated to purchase or cause a third party to purchase the leased property or pay an agreed upon residual value of the leased property, including the obligations under such lease or related document to purchase or cause a third party to purchase such leased property (whether or not such lease transaction is characterized as an operating lease or a capitalized lease in accordance with GAAP) or pay an agreed upon residual value of the leased property to the lessor;

(5) all obligations with respect to an interest rate or other swap, cap or collar agreement or other similar instrument or agreement or foreign currency hedge, exchange, purchase agreement or other similar instrument or agreement;

(6) all direct or indirect guaranties or similar agreements in respect of, and our obligations or liabilities to purchase, acquire or otherwise assure a creditor against loss in respect of, indebtedness, obligations or liabilities of others of the type described in (1) through (5) above;

(7) any indebtedness or other obligations described in (1) through (6) above secured by any mortgage, pledge, lien or other encumbrance existing on property which is owned or held by us; and

(8) any and all refinancings, replacements, deferrals, renewals, extensions and refundings of, or amendments, modifications or supplements to, any indebtedness, obligation or liability of the kind described in clauses (1) through (7) above.

“senior indebtedness” means the principal, premium, if any, interest, including any interest accruing after bankruptcy, and rent or termination payment on or other amounts due on our current or future indebtedness, whether created, incurred, assumed, guaranteed or in effect guaranteed by us, including any deferrals, renewals, extensions, refundings, amendments, modifications or supplements to the above. However, senior indebtedness does not include:

- indebtedness that expressly provides that it shall not be senior in right of payment to subordinated debt securities or expressly provides that it is on the same basis or junior to subordinated debt securities;
- our indebtedness to any of our majority-owned subsidiaries; and
- subordinated debt securities.

DESCRIPTION OF PREFERRED STOCK

We currently have authorized 5,000,000 shares of preferred stock, par value $.001 per share. As of the date of this prospectus, we do not have any shares of preferred stock outstanding. Under our Restated Certificate of Incorporation, our Board of Directors is authorized to issue shares of our preferred stock from time to time, in one or more classes or series, without stockholder approval. Prior to the issuance of shares of each series, the Board of Directors is required by the General Corporation Law of the State of Delaware and our Restated Certificate of Incorporation to adopt resolutions and file a Certificate of Designation with the Secretary of State of the State of Delaware, fixing for each such series the designations, powers, preferences, rights, qualifications, limitations and restrictions of the shares of such series. Any exercise of our Board of Directors of its rights to do so may affect the rights and entitlements of the holders of our common stock as set forth below.

Our Board of Directors could authorize the issuance of shares of preferred stock with terms and conditions which could have the effect of discouraging a takeover or other transaction which holders of some, or a majority, of such shares might believe to be in their best interests or in which holders of some, or a majority, of such shares might receive a premium for their shares over the then-market price of such shares.

General

Subject to limitations prescribed by the General Corporation Law of the State of Delaware, our Restated Certificate of Incorporation and our Amended and Restated By-Laws ("By-Laws"), our Board of Directors is authorized to fix the number of shares constituting each series of preferred stock and the designations, powers, preferences, rights, qualifications, limitations and restrictions of the shares of such series, including such provisions as may be desired concerning voting, redemption, dividends, dissolution or the distribution of assets, conversion or exchange, and such other subjects or matters as may be fixed by resolution of the Board of Directors. Each series of preferred stock that we offer under this prospectus will, when issued, be fully paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

The applicable prospectus supplement(s) will describe the following terms of the series of preferred stock in respect of which this prospectus is being delivered:

- the title and stated value of the preferred stock;
- the number of shares of the preferred stock offered, the liquidation preference per share and the purchase price of the preferred stock;
- the dividend rate(s), period(s) and/or payment date(s) or the method(s) of calculation for dividends;
- whether dividends shall be cumulative or non-cumulative and, if cumulative, the date from which dividends on the preferred stock shall accumulate;
- the procedures for any auction and remarketing, if any, for the preferred stock;
- the provisions for a sinking fund, if any, for the preferred stock;
- the provisions for redemption, if applicable, of the preferred stock;
- any listing of the preferred stock on any securities exchange or market;
- the terms and conditions, if applicable, upon which the preferred stock will be convertible into common stock or another series of our preferred stock, including the conversion price (or its manner of calculation) and conversion period;
- the terms and conditions, if applicable, upon which preferred stock will be exchangeable into our debt securities, including the exchange price, or its manner of calculation, and exchange period;
- voting rights, if any, of the preferred stock; a discussion of any material and/or special United States federal income tax considerations applicable to the preferred stock;
- whether interests in the preferred stock will be represented by depositary shares;

- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs;

- any limitations on issuance of any series of preferred stock ranking senior to or on a parity with the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs; and

- any other specific terms, preferences, rights, limitations or restrictions on the preferred stock.

Unless otherwise specified in the prospectus supplement, the preferred stock will, with respect to dividend rights and rights upon liquidation, dissolution or winding up of Discovery rank:

- senior to all classes or series of our common stock, and to all equity securities issued by us the terms of which specifically provide that such equity securities rank junior to the preferred stock with respect to dividend rights or rights upon the liquidation, dissolution or winding up of us;

- on a parity with all equity securities issued by us that do not rank senior or junior to the preferred stock with respect to dividend rights or rights upon the liquidation, dissolution or winding up of us; and

- junior to all equity securities issued by us the terms of which do not specifically provide that such equity securities rank on a parity with or junior to the preferred stock with respect to dividend rights or rights upon the liquidation, dissolution or winding up of us (including any entity with which we may be merged or consolidated or to which all or substantially all of our assets may be transferred or which transfers all or substantially all of our assets).

As used for these purposes, the term “equity securities” does not include convertible debt securities.

Transfer Agent and Registrar

The transfer agent and registrar for any series of preferred stock will be set forth in the applicable prospectus supplement.

DESCRIPTION OF COMMON STOCK

This description of our common stock is a summary. You should keep in mind, however, that it is our Restated Certificate of Incorporation and our By-Laws, and not this summary, which define any rights you may acquire as a stockholder. There may be other provisions in such documents which are also important to you. You should read such documents for a full description of the terms of our capital stock, along with the applicable provisions of Delaware law.

We currently have authorized 380,000,000 shares of common stock, par value $0.001 per share. As of May 31, 2010, there were 158,064,779 shares of common stock outstanding, which does not include:

- 15,685,845 shares of common stock issuable upon exercise of options outstanding as of May 31, 2010, at a weighted average exercise price of $3.77 per share;

- 27,846,740 shares of common stock issuable upon exercise of warrants outstanding as of May 31, 2010, at a weighted average exercise price of $1.42;

- 12,767,564 shares of common stock reserved for potential future issuance pursuant to the May 2008 CEFF;

- 7,117,622 shares of common stock reserved for potential future issuance pursuant to the December 2008 CEFF;

- an indeterminate number of shares of common stock issuable under our shelf registration statement on Form S-3 (No. 333-128929) dated October 11, 2005;

- 1,922,113 shares of common stock available for future grant under our 2007 Long-Term Incentive Plan; and

- 367,928 shares of common stock reserved for potential future issuance pursuant to a 401(k) Plan, as of May 31, 2010.

Subject to any preferential rights of any preferred stock created by our Board of Directors, as a holder of our common stock you are entitled to such dividends as our Board of Directors may declare from time to time out of funds that we can legally use to pay dividends. The holders of common stock possess exclusive voting rights, except to the extent our Board of Directors specifies voting power for any preferred stock that, in the future, may be issued.

As a holder of our common stock, you are entitled to one vote for each share of common stock and do not have any right to cumulate votes in the election of directors. Upon our liquidation, dissolution or winding-up, you will be entitled to receive on a proportionate basis any assets remaining after provision for payment of creditors and after payment of any liquidation preferences to holders of preferred stock. Holders of our common stock have no preemptive rights and no conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. All the outstanding shares of common stock are, and the shares offered by this prospectus, when issued and paid for, will be, validly issued, fully paid and nonassessable. Our common stock is quoted on The NASDAQ Capital Market under the symbol “DSCO.

Stockholder Rights Plan

The summary description of the Rights set out herein does not purport to be complete, and is qualified in its entirety by reference to the terms and provisions of our Shareholder Rights Agreement, dated as of February 6, 2004.

On February 6, 2004, our Board of Directors adopted a shareholder rights agreement (the Rights Agreement). Pursuant to the Rights Agreement our Board of Directors (i) declared that each stockholder of record as of the close of business on February 6, 2004, would be issued a dividend of one preferred stock purchase right (a “Right”) for each share of our common stock held by such stockholder and (ii) determined that each share of common stock issued by us after such date through the Final Expiration Date (as defined below) shall be issued with a tandem Right. Each Right represents the right to purchase one ten-thousandth of a share of our Series A Junior Participating Cumulative Preferred Stock (“Series A Preferred”) at an exercise price equal to $50 per Right (as the same may be adjusted, the “Exercise Price”). The Rights shall be evidenced by certificates for our common stock until the earlier to occur of:

- 10 days following a public announcement that a person or group of affiliated or associated persons (with certain exceptions, an “Acquiring Person”) have acquired beneficial ownership of 15% or more of the outstanding shares of our common stock; and

- 10 business days (or such later date as may be determined by action of the Board of Directors before such time as any person or group of affiliated persons becomes an Acquiring Person) following the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of 15% or more of the outstanding shares of Common Stock (the earlier of such dates being called the “Distribution Date”).

The Rights are not exercisable until the Distribution Date. Until a Right is exercised, the holder thereof, as such, will have no rights as a Discovery stockholder, including, without limitation, the right to vote or to receive dividends.

The Rights will expire upon the close of business on February 6, 2014 (the “Final Expiration Date”), unless the Rights are earlier redeemed or exchanged by us, in each case as described below.

The shares of Series A Preferred purchasable upon exercise of the Rights will be entitled, when, as and if declared, to a minimum preferential quarterly dividend payment of 10,000 times the per share amount of dividends declared on our common stock. If no common stock dividend is declared in a quarter, a preferred stock quarterly dividend of $1.00 per share will be required. Upon our liquidation, holders of Series A Preferred will be entitled to a preferential distribution payment of at least 10,000 times the payment made per share of common stock. Each share of Series A Preferred will entitle the holder to 10,000 votes, voting together with our common stock. Upon any merger, consolidation or other transaction in which shares of our common stock are converted or exchanged, the holders of Series A Preferred will be entitled to receive 10,000 times the amount of consideration received per share of our common stock in respect of such transaction. The Rights are protected by customary anti-dilution provisions.

Because of the nature of the Series A Preferred dividend and liquidation rights, the fair market value of the one ten-thousandth of a share of Series A Preferred purchasable upon exercise of each Right should approximate the fair market value of one share of our common stock. If any person or group of affiliated or associated persons becomes an Acquiring Person, each holder of a Right, (other than Rights beneficially owned by the Acquiring Person, which become void), will have the right to receive upon exercise and payment of the then current Exercise Price, that number of shares of our common stock having a market value of two times the Exercise Price.

If, after a person or group has become an Acquiring Person, we are acquired in a merger or other business combination transaction, or 50% or more of our consolidated assets or earning power are sold, proper provision will be made so that each holder of a Right (other than Rights beneficially owned by an Acquiring Person, which become void) will thereafter have the right to receive, upon exercise at the then current Exercise Price, that number of shares of common stock of the person with whom we engaged in the foregoing transaction (or its parent), which at the time of such transaction will have a market value of two times the Exercise Price. In lieu of exercise, our Board of Directors may exchange the Rights (other than Rights owned by an Acquiring Person, which become void), in whole or in part, for such securities or other property or rights as the Board may determine, including any class or series of our common stock or preferred stock.

At any time before the time an Acquiring Person becomes such, our Board of Directors may redeem the Rights in whole, but not in part, at a price of $.001 per Right, subject to adjustment.

We may amend the Rights to the extent and on the conditions set out in the Rights Agreement.

Anti-Takeover Provisions

As a corporation organized under the laws of the State of Delaware, we are subject to Section 203 of the General Corporation Law of the State of Delaware, which restricts our ability to enter into business combinations with an interested stockholder or a stockholder owning 15% or more of our outstanding voting stock, or that stockholder's affiliates or associates, for a period of three years. These restrictions do not apply if:

- before becoming an interested stockholder, our Board of Directors approves either the business combination or the transaction in which the stockholder becomes an interested stockholder;

- upon consummation of the transaction in which the stockholder becomes an interested stockholder, the interested stockholder owns at least 85% of our voting stock outstanding at the time the transaction commenced, subject to exceptions; or

- on or after the date a stockholder becomes an interested stockholder, the business combination is both approved by our Board of Directors and authorized at an annual or special meeting of our stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

Number of Directors; Removal

Our By-Laws provide that our Board of Directors shall consist of at least three directors and may consist of such larger number as may be determined, from time-to-time, by the Board of Directors. Our By-laws provide that directors may be removed with or without cause by the affirmative vote of holders of a majority of the total voting power of all outstanding securities.

This provision and the Board of Directors' right to issue shares of our preferred stock from time to time, in one or more classes or series without stockholder approval are intended to enhance the likelihood of continuity and stability in the composition of the policies formulated by our Board of Directors. These provisions are also intended to discourage some tactics that may be used in proxy fights.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is Continental Stock Transfer & Trust Company.

DESCRIPTION OF WARRANTS

Outstanding Warrants

As of May 31, 2010, 27,846,740 shares of common stock were issuable upon the exercise of outstanding warrants, at a weighted average exercise price of $1.42.

We may issue, in one or more series, debt warrants to purchase debt securities, as well as equity warrants to purchase preferred stock or common stock. The warrants may be issued independently or together with any securities and may be attached to or separate from the securities. If the warrants are issued pursuant to warrant agreements, we will so specify in the prospectus supplement relating to the warrants being offered pursuant to the prospectus supplement. While the following the terms described below will apply generally to any warrants we may offer, we will describe the particular terms of any series of warrants in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement for a particular series of warrants may specify different or additional terms than those specified below.

Debt Warrants

The applicable prospectus supplement will describe the terms of debt warrants offered, the warrant agreement relating to the debt warrants and the debt warrant certificates representing the debt warrants, including the following:

- the title of the debt warrants;
- the aggregate number of the debt warrants;
- the price or prices at which the debt warrants will be issued;
- the designation, aggregate principal amount and terms of the debt securities purchasable upon exercise of the debt warrants, and the procedures and conditions relating to the exercise of the debt warrants;
- the designation and terms of any related debt securities with which the debt warrants are issued, and the number of the debt warrants issued with each debt security;
- the principal amount of debt securities purchasable upon exercise of each debt warrant;
- the date on which the right to exercise the debt warrants will commence, and the date on which this right will expire;
- the maximum or minimum number of debt warrants which may be exercised at any time;
- a discussion of any material federal income tax considerations; and
- any other terms of the debt warrants and terms, procedures and limitations relating to the exercise of debt warrants.

Debt warrant certificates will be exchangeable for new debt warrant certificates of different denominations, and debt warrants may be exercised at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement, by delivering the properly completed and duly executed warrant certificate and paying the required amount to the warrant agent in immediately available funds. Prior to the exercise of their debt warrants, holders of debt warrants will not have any of the rights of holders of the debt securities purchasable upon exercise and will not be entitled to payment of principal of or any premium, if any, or interest on the debt securities purchasable upon exercise.

Equity Warrants

The applicable prospectus supplement will describe the following terms of equity warrants offered:

- the title of the equity warrants;

- the securities (i.e., preferred stock or common stock) for which the equity warrants are exercisable;

- the price or prices at which the equity warrants will be issued;

- if applicable, the designation and terms of the preferred stock or common stock with which the equity warrants are issued, and the number of equity warrants issued with each share of preferred stock or common stock; and

- any other terms of the equity warrants, including terms, procedures and limitations relating to the exchange and exercise of equity warrants.

Holders of equity warrants will not be entitled, by virtue of being such holders, to vote, consent, receive dividends, receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter, or to exercise any rights whatsoever as our stockholders.

The exercise price payable and the number of shares of common stock or preferred stock purchasable upon the exercise of each equity warrant will be subject to adjustment in certain events, including the issuance of a stock dividend to holders of common stock or preferred stock or a stock split, reverse stock split, combination, subdivision or reclassification of common stock or preferred stock. In lieu of adjusting the number of shares of common stock or preferred stock purchasable upon exercise of each equity warrant, we may elect to adjust the number of equity warrants. No adjustments in the number of shares purchasable upon exercise of the equity warrants will be required until cumulative adjustments require an adjustment of at least 1% thereof. We may, at our option, reduce the exercise price at any time. No fractional shares will be issued upon exercise of equity warrants, but we will pay the cash value of any fractional shares otherwise issuable. Notwithstanding the foregoing, in case of any consolidation, merger, or sale or conveyance of our property as an entirety or substantially as an entirety, the holder of each outstanding equity warrant shall have the right to the kind and amount of shares of stock and other securities and property, including cash, receivable by a holder of the number of shares of common stock or preferred stock into which the equity warrant was exercisable immediately prior to the transaction.

Exercise of Warrants

Each warrant will entitle the holder to purchase for cash such principal amount of securities or shares of stock at such exercise price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the warrants offered thereby. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the prospectus supplement relating to the warrants offered thereby. After the close of business on the expiration date, unexercised warrants will become void.

The warrants may be exercised as set forth in the prospectus supplement relating to the warrants offered. Upon receipt of payment and the taking of other action specified in the applicable prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon exercise. If less than all of the warrants represented by such warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

Warrant issued to Kingsbridge

A description of the warrant issued to Kingsbridge pursuant to the registration statement of which this prospectus is a part in connection with our committed equity financing facility (CEFF) is contained in the section “Plan of Distribution” and is incorporated herein by reference.

PLAN OF DISTRIBUTION

We may sell the securities being offered by us in this prospectus pursuant to underwritten public offerings, negotiated transactions, block trades or any combination of such methods. We may sell the securities to or through underwriters, dealers, agents or directly to one or more purchasers. We and our agents reserve the right to accept and to reject in whole or in part any proposed purchase of securities. A prospectus supplement or post-effective amendment, which we will file each time we effect an offering of any securities, will provide the names of any underwriters, dealers or agents, if any, involved in the sale of such securities, and any applicable fees, commissions, or discounts to which such persons shall be entitled to in connection with such offering.

We and our agents, dealers and underwriters, as applicable, may sell the securities being offered by us in this prospectus from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices;
- varying prices determined at the time of sale; or
- negotiated prices.

We may determine the price or other terms of the securities offered under this prospectus by use of an electronic auction. We will describe how any auction will determine the price or any other terms, how potential investors may participate in the auction and the nature of the underwriters' obligations in the applicable prospectus supplement or amendment.

We may solicit directly offers to purchase securities. We may also designate agents from time to time to solicit offers to purchase securities. Any agent that we designate, who may be deemed to be an underwriter as that term is defined in the Securities Act, may then resell such securities to the public at varying prices to be determined by such agent at the time of resale.

We may engage in at the market offerings of our common stock. An at the market offering is an offering of our common stock at other than a fixed price to or through a market maker. We shall name any underwriter that we engage for an at the market offering in a post-effective amendment to the registration statement containing this prospectus. We shall also describe any additional details of our arrangement with such underwriter, including commissions or fees paid, or discounts offered, by us and whether such underwriter is acting as principal or agent, in the related prospectus supplement.

If we use underwriters to sell securities, we will enter into an underwriting agreement with the underwriters at the time of the sale to them, which agreement shall be filed as an exhibit to the related prospectus supplement. Underwriters may also receive commissions from purchasers of the securities. Underwriters may also use dealers to sell securities. In such an event, the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents.

Underwriters, dealers, agents and other persons may be entitled, under agreements that may be entered into with us, to indemnification by us against certain civil liabilities, including liabilities under the Securities Act or to contribution with respect to payments which they may be required to make in respect of such liabilities. Underwriters and agents may engage in transactions with, or perform services for, us in the ordinary course of business.

If so indicated in the applicable prospectus supplement, we may authorize underwriters, dealers or other persons to solicit offers by certain institutions to purchase the securities offered by us under this prospectus pursuant to contracts providing for payment and delivery on a future date or dates. The obligations of any purchaser under these contracts will be subject only to those conditions described in the applicable prospectus supplement, and the prospectus supplement will set forth the price to be paid for securities pursuant to those contracts and the commissions payable for solicitation of the contracts.

Any underwriter may engage in over-allotment, stabilizing and syndicate short covering transactions and penalty bids in accordance with Regulation M of the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions involve bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Syndicate short covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the underwriters to reclaim selling concessions from dealers when the securities originally sold by such dealers are purchased in covering transactions to cover syndicate short positions. These transactions may cause the price of the securities sold in an offering to be higher than it would otherwise be. These transactions, if commenced, may be discontinued by the underwriters at any time.

Our common stock is quoted on Nasdaq Capital Market under the symbol “DSCO.” The other securities are not listed on any securities exchange or other stock market and, unless we state otherwise in the applicable prospectus supplement, we do not intend to apply for listing of the other securities on any securities exchange or other stock market. Any underwriters to whom we sell securities for public offering and sale may make a market in the securities that they purchase, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. Accordingly, we give you no assurance as to the development or liquidity of any trading market for the securities.

The anticipated date of delivery of the securities offered hereby will be set forth in the applicable prospectus supplement relating to each offering.

In order to comply with certain state securities laws, if applicable, the securities may be sold in such jurisdictions only through registered or licensed brokers or dealers. In certain states, the securities may not be sold unless the securities have been registered or qualified for sale in such state or an exemption from regulation or qualification is available and is complied with. Sales of securities must also be made by us in compliance with all other applicable state securities laws and regulations.

We shall pay all expenses of the registration of the securities.

Committed Equity Financing Facility (CEFF)

On June 11, 2010, we entered into our fifth Committed Equity Financing Facility (CEFF) with Kingsbridge Capital Limited (Kingsbridge), a private investment firm. Specifically, we entered into a Common Stock Purchase Agreement, which entitles us to sell, and obligates Kingsbridge to purchase, from time to time over a period of three years, subject to certain conditions and restrictions, shares of our common stock for cash consideration of up to an aggregate of the lesser of $35 million or 31,597,149 shares, representing 19.99% of the shares of our common stock outstanding as of such date (but in no event more than the number of shares that we may issue under the CEFF without breaching our obligations under the rules and regulations of The NASDAQ Capital Market ® and the principal trading market at the time, including those relating to stockholder approval.)

As consideration for the execution and delivery of the Common Stock Purchase Agreement, we also issued, pursuant to the registration statement of which this prospectus forms a part, a Warrant to Kingsbridge to purchase up to 1,250,000 shares of our common stock at a price of $0.4459 per share, which is fully exercisable (in whole or in part) beginning December 11, 2010 and for a period of five years thereafter. The Warrant is generally exercisable for cash except, in certain circumstances the Warrant may be exercised on a cashless basis. In addition, the holder of the Warrant may not exercise the Warrant to the extent that the shares to be received pursuant to the exercise, when aggregated with all other shares beneficially owned by such holder, would result in the holder owning more than 9.9% of the common stock outstanding on the exercise date or our being required to file any notification or report under the Hart Scott Rodino Antitrust Improvements Act of 1976, as amended. The exercise price of the Warrant is subject to anti-dilution adjustments, including upon reclassification, consolidation, merger, mandatory share exchange, sale of substantially all assets, subdivision or combination of shares, issuance of stock dividends, issuance of liquidating dividends and spin-offs. In case of a failure by Kingsbridge, reasonably within the control of Kingsbridge, to accept a properly made draw down notice under the CEFF, the Warrant permits us to demand surrender of the Warrant or any remaining portion of the Warrant, shares underlying the Warrant or cash from the holder under certain circumstances as described in the Warrant.

The shares of common stock that may be issued to Kingsbridge under the Common Stock Purchase Agreement and upon exercise of the Warrant will be issued pursuant to the registration statement to which this prospectus relates. Through this prospectus, Kingsbridge may offer to the public for sale the shares of our common stock that we may issue to it pursuant to the Common Stock Purchase Agreement, or that Kingsbridge may acquire upon exercise of the Warrant.

Under the CEFF, for a period of 36 months from the date of execution of the Common Stock Purchase Agreement, we may, from time to time, at our discretion and subject to certain conditions that we must satisfy, "draw down" funds under the CEFF by selling shares of our common stock to Kingsbridge. To initiate a draw down, we will issue to Kingsbridge a "draw down notice" containing among other information the total draw down amount, the first day of the draw down pricing period, which will consist of eight consecutive trading days, and the "threshold price," or the minimum price at which a purchase may be completed on any trading day. The threshold price may be either (i) 90% of the closing price of our common stock on the trading day immediately preceding the first trading day of the draw down pricing period or (ii) a price that we determine, in our sole discretion, but not less than $0.20 per share. The purchase price of the shares to be purchased in a draw down will be at a discount ranging from 4.375% to 17.5% of the volume-weighted average price (VWAP) of our common stock for each of the eight consecutive trading days in the draw down pricing period. The discount on each trading day will be determined as follows:

VWAP*	**% of VWAP (Applicable Discount)**
Equal to or exceeds $6.00	4.375
Equal to or exceeds $5.00 but is less than $6.00	4.750
Equal to or exceeds $4.00 but is less than $5.00	5.250
Equal to or exceeds $3.00 but is less than $4.00	5.750
Equal to or exceeds $2.00 but is less than $3.00	6.000
Equal to or exceeds $1.25 but is less than $2.00	7.500
Equal to or exceeds $0.75 but is less than $1.25	8.500
Equal to or exceeds $0.50 but is less than $0.75	9.500
Equal to or exceeds $0.25 but is less than $0.50	15.000
Equal to or exceeds $0.20 but is less than $0.25	17.500

* As defined in the Common Stock Purchase Agreement, "VWAP" means the volume-weighted average price per share (the aggregate sales price of all trades of our common stock during each trading day divided by the total number of shares of common stock traded during that trading day) of our common stock during any trading day as reported by Bloomberg, L.P. using the AQR function or another mutually agreed recognized trading platform.

If the daily VWAP of our common stock falls below a threshold price on any trading day during a draw down pricing period, the Common Stock Purchase Agreement provides that any such trading day will be disregarded in calculating the number of shares of common stock to be issued in respect of the draw down pricing period and the total draw down amount shall be reduced by one eighth for each such day. However, at its election, Kingsbridge may buy up to the pro-rata portion of shares allocated to any day that is disregarded at a purchase price determined by reference to the threshold price instead of the VWAP, less the discount specified in the table above.

In addition, if trading in our common stock is suspended for any reason for more than three consecutive or non-consecutive hours during any trading day during a draw down pricing period, Kingsbridge will not be required, but may elect, to purchase the pro-rata portion of shares of common stock allocated to that day.

Our ability to require Kingsbridge to purchase our common stock is subject to various limitations. Each draw down is limited to the lesser of $15 million or 3.5% of our market capitalization as of the date on which the draw down notice is delivered. Unless Kingsbridge agrees otherwise, a minimum of three trading days must elapse between the expiration of any draw down pricing period and the beginning of the next draw down pricing period. Kingsbridge is not obligated to purchase shares at a purchase price that is below $0.20 per share (before applicable discount). Accordingly, there is no assurance that we will be able to access the CEFF, if ever, at such times and in amounts that are necessary to fund our activities.

The Common Stock Purchase Agreement also provides that, in connection with each draw down, we may in our discretion include in our draw down notice a request that Kingsbridge purchase an amount that is in addition to the amount that Kingsbridge is otherwise obligated under the Common Stock Purchase Agreement to purchase in connection with such draw down pricing period (a supplemental amount). If we designate a supplemental amount, we may also designate a separate threshold price with respect to such supplemental amount, subject to a minimum price per share of $0.20. The supplemental amount in each draw down pricing period is not subject to a dollar limitation, except that, when aggregated with all other amounts drawn by us under the Common Stock Purchase Agreement, the supplemental amount may not exceed the total commitment amount available under the agreement. If Kingsbridge agrees to purchase any supplemental amount, in whole or in part, we will sell to Kingsbridge that number of shares of our common stock that equals the supplemental amount, or portion thereof designated by Kingsbridge, at a price equal to the greater of (i) the daily VWAP of our common stock on the trading day with respect to which Kingsbridge notifies us of its election to exercise its option or (ii) the supplemental amount threshold price designated by us, in either case less a discount calculated in the same manner specified in the table above.

During the term of the CEFF, without the written consent of Kingsbridge, we may not enter into any equity line or other financing that is substantially similar to the CEFF or agree to issue any shares of common stock or securities of any type that are, or may become, convertible or exchangeable into shares of common stock where the purchase, conversion or exchange price for such common stock is determined using any floating discount or other post-issuance adjustable discount to the market price of common stock. Any future issuance by us of a convertible security that (i) contains provisions that adjust the conversion price of such convertible security solely for stock splits, dividends, distributions or similar events or pursuant to anti-dilution provisions or (ii) is issued in connection with debt financing to support research and development activities and conditioned upon us meeting certain developmental milestones and of any security issued in a secured debt financing is permitted.

Kingsbridge agreed in the Common Stock Purchase Agreement that, during the term of the CEFF, neither Kingsbridge nor any of its affiliates, nor any entity managed or controlled by it, will, or will cause or assist any person to, enter into any short sale of any of our securities, as “short sale” is defined in Regulation SHO promulgated under the Securities Exchange Act of 1934, as amended.

Before Kingsbridge is obligated to buy any shares of our common stock pursuant to a draw down, the following conditions, none of which is in Kingsbridge’s control, must be met or waived:

- Each of our representations and warranties in the Common Stock Purchase Agreement must be true and correct in all material respects as of the date when made and as of the date of the applicable draw down notice as though made at that time, except for representations and warranties that are expressly made as of a particular date.

- We must have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required to be performed, satisfied or complied with by us under the Common Stock Purchase Agreement and the Warrant.

- We must have complied in all respects with all applicable federal, state and local governmental laws, rules, regulations and ordinances in connection with the execution, delivery and performance of the Common Stock Purchase Agreement and the consummation of the transactions it contemplates except for any failures to so comply that would not reasonably be expected to have a material adverse effect on us.

- The registration statement that includes this prospectus must be effective under the Securities Act and neither we nor Kingsbridge shall have received notice that the SEC has issued or intends to issue a stop order with respect to the registration statement or that the SEC otherwise has suspended or withdrawn the effectiveness of the registration statement, or intends or has threatened to do so and no other suspension of the use or withdrawal of the effectiveness of the registration statement shall exist.

- We must not have knowledge of any event that could reasonably be expected to have the effect of causing the registration statement to be suspended or otherwise ineffective as of the settlement date for the purchase of shares under the CEFF.

- Trading in our common stock shall not have been suspended by the SEC, The NASDAQ Capital Market (or other principal market on which our common stock is traded) or the Financial Industry Regulatory Authority and trading in securities generally on The NASDAQ Capital Market (or other principal market on which our common stock is traded) shall not have been suspended or limited.

- No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed or, to our knowledge, threatened by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by the Common Stock Purchase Agreement.

- No action, suit or proceeding before any arbitrator or any governmental authority shall be pending or, to our knowledge, threatened, and, to our knowledge, no inquiry or investigation by any governmental authority shall have been threatened against us or any of our officers, directors or affiliates seeking to enjoin, prevent or change the transactions contemplated by the Common Stock Purchase Agreement, or seeking material damages in connection with such transactions, except for any action, suit or proceeding which could not reasonably be expected to have a material adverse effect.

- We must have sufficient shares of common stock, calculated using the closing trade price of the common stock as of the trading day immediately preceding a draw down, registered under the registration statement to issue and sell such shares in accordance with such draw down.

- We must generally be current on any and all invoices submitted to us regarding fees and expenses of Kingsbridge, except for such fees, or portion thereof, that we dispute in good faith.

- Prior to delivery of the first draw down notice, Kingsbridge must have received an opinion from our outside legal counsel.

There is no guarantee that we will be able to meet the foregoing conditions or any other conditions under the Common Stock Purchase Agreement or that we will be able to draw down any portion of the amounts available under the CEFF.

We are entitled in certain circumstances, including the existence of certain kinds of nonpublic information, to deliver a blackout notice to Kingsbridge to suspend the use of this prospectus and prohibit Kingsbridge from selling shares under this prospectus, for not more than 30 days. If we deliver a blackout notice in the five trading days following the settlement of a draw down, then we must pay amounts to Kingsbridge, or issue Kingsbridge additional shares in lieu of payment, calculated by means of a varying percentage of an amount based on the number of shares held by Kingsbridge that were purchased pursuant to the draw down and the change in the market price of our common stock between the date the blackout notice is delivered and the date the prospectus again becomes available.

Kingsbridge may terminate the CEFF upon one business day's notice to us if we enter into a transaction prohibited by the Common Stock Purchase Agreement without Kingsbridge's prior written consent or if a material adverse effect relating to our business continues for ten trading days after we receive notice from Kingsbridge of the material adverse effect. We may terminate the CEFF upon one business day's notice to Kingsbridge, except that we may not terminate the CEFF during any draw down pricing period. In addition, either we or Kingsbridge may terminate the CEFF upon one business day's notice if the other party has breached a material representation, warranty or covenant to the Common Stock Purchase Agreement and such breach is not remedied within 10 trading days after notice of such breach is delivered to the breaching party.

The foregoing summary of the CEFF does not purport to be complete and is qualified by reference to the Common Stock Purchase Agreement and the Warrant, copies of which have been filed or incorporated by reference as exhibits to the registration statement of which this prospectus is a part.

In addition to our issuance of shares of common stock to Kingsbridge pursuant to the Common Stock Purchase Agreement and of the Warrant issued to Kingsbridge as consideration for the execution of the Common Stock Purchase Agreement, the registration statement to which this prospectus relates also covers the sale of those shares and the shares issuable upon exercise of the Warrant, from time to time by Kingsbridge to the public.

As described above, the number of shares to be issued by us in connection with any draw down pricing period, and the aggregate purchase price for these shares, will not be known until the draw down pricing period is complete. Accordingly, we do not expect that we will publicly announce the issuance by us of a draw down notice to Kingsbridge, if any, including a request to have Kingsbridge purchase a supplemental amount of shares of our common stock during a draw down pricing period, until the completion of the draw down pricing period. Following completion of the draw down pricing period, we will file with the Securities and Exchange Commission (the "SEC") a prospectus supplement to this prospectus covering such sale of shares.

The shares of common stock issued under the Common Stock Purchase Agreement may be sold in one or more of the following manners:

- ordinary brokerage transactions and transactions in which the broker solicits purchasers; or

- a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction.

In addition, Kingsbridge and any unaffiliated broker-dealer will be subject to liability under the federal securities laws and must comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of common stock by Kingsbridge or any unaffiliated broker-dealer. Under these rules and regulations, Kingsbridge and any unaffiliated broker-dealer:

- may not engage in any stabilization activity in connection with our common stock;

- must furnish each broker which offers shares of our common stock covered by the prospectus that is a part of our registration statement with the number of copies of such prospectus and any prospectus supplement which are required by each broker; and

- may not bid for or purchase any of our common stock or attempt to induce any person to purchase any of our common stock other than as permitted under the Exchange Act.

These restrictions may affect the marketability of the shares of common stock purchased and sold by Kingsbridge and any unaffiliated broker-dealer.

We and Kingsbridge have agreed to indemnify and hold each other and each person who controls us and Kingsbridge, respectively, harmless against certain liabilities, including certain liabilities under the Securities Act. We have agreed to pay up to $45,000 of Kingsbridge's reasonable attorneys' fees and expenses (exclusive of disbursements and out-of-pocket expenses) incurred by Kingsbridge in connection with the preparation, negotiation, execution and delivery of the Common Stock Purchase Agreement and related transaction documentation. We have also agreed to pay (i) certain fees and expenses incurred by Kingsbridge in connection with any amendments, modifications or waivers of the Common Stock Purchase Agreement and (ii) as compensation for all other ongoing due diligence of our company, legal and transaction expenses of Kingsbridge, a fee equal to 1.85% of the gross proceeds of each individual draw down. We may also have to pay a fee of $15,000 for any calendar quarter during which we elect not to deliver a draw down notice under the CEFF. Further, if we issue a draw down notice and fail to cause delivery of the shares to Kingsbridge within two trading days of the applicable settlement date, we have agreed to pay Kingsbridge as liquidated damages (prorated over the initial 30 days following the settlement date) equal to 2% of the payment required to be made by Kingsbridge with respect to such shares and an amount that when taken together with the liquidated damages, compensates Kingsbridge for any actual loss incurred as a result of failure to deliver.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2009, and the effectiveness of our internal control over financial reporting as of December 31, 2009, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

LEGAL MATTERS

If and when the securities being registered hereunder are issued, the validity of such issuance will be passed upon for us by Sonnenschein Nath & Rosenthal LLP, New York, New York.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and periodic reports, proxy statements and other information with the SEC. You may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Many of our SEC filings are also available to the public from the SEC's Website at "http://www.sec.gov." We make available free of charge our annual, quarterly and current reports, proxy statements and other information upon request. To request such materials, please send an e-mail to ir@DiscoveryLabs.com or contact John G. Cooper, our Executive Vice President, Chief Financial Officer, at the following address or telephone number: Discovery Laboratories, Inc., 2600 Kelly Road, Suite 100, Warrington, Pennsylvania 18976, Attention: John G. Cooper; (215) 488-9300. Exhibits to the documents will not be sent, unless those exhibits have specifically been incorporated by reference in this prospectus.

We maintain a Website at “http://www.DiscoveryLabs.com”. Our Website and the information contained therein or connected thereto are not incorporated into this Registration Statement.

We have filed with the SEC a registration statement on Form S-3 under the Securities Act relating to the securities we are offering by this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. Please refer to the registration statement and its exhibits and schedules for further information with respect to us and our securities. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of that contract or document filed as an exhibit to the registration statement. You may read and obtain a copy of the registration statement and its exhibits and schedules from the SEC, as described in the preceding paragraph.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents filed with SEC listed below:

1. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2009, filed on March 10, 2010, as amended by our Annual Report on Form 10-K/A, filed on April 30, 2010;

2. Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 10, 2010;

3. Our Current Reports on Form 8-K filed with the SEC on February 16, 2010, February 18, 2010, February 26, 2010, March 15, 2010 (excluding the matters in Item 2.02 and Exhibit 99.1 therein, which are not incorporated by reference herein), April 28, 2010 (excluding the matters in Item 2.02 and Exhibit 99.1 therein, which are not incorporated by reference herein), April 29, 2010, May 21, 2010, June 4, 2010, June 9, 2010, June 9, 2010 and June 14, 2010; and

4. The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on July 13, 1995.

All reports and other documents subsequently filed by us with the SEC pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and before the termination of the offering shall be deemed to be incorporated by reference in this prospectus and to be a part of this prospectus from the date of filing of such reports and documents. This prospectus also incorporates by reference any documents that we file with the SEC after the date of the initial registration statement and before the effectiveness of the registration statement. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these filings, at no cost, by sending an e-mail to ir@DiscoveryLabs.com and requesting any one or more of such filings or by contacting John G. Cooper, our Executive Vice President, Chief Financial Officer, at the following address or telephone number: Discovery Laboratories, Inc., 2600 Kelly Road, Suite 100, Warrington, Pennsylvania 18976-3622, Attention: John G. Cooper; (215) 488-9300. Exhibits to the documents will not be sent, unless those exhibits have specifically been incorporated by reference in this prospectus.

$150,000,000

Discovery Laboratories, Inc.

Debt Securities, Preferred Stock and Common Stock,
Debt Warrants and Equity Warrants

No dealer, salesperson or other person is authorized to provide you with information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. We are offering to sell, and seeking offers to buy, only the securities of Discovery Laboratories, Inc. covered by this prospectus, and only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date, regardless of the time of delivery of this prospectus or of any sale of the shares.

June 11, 2010

10,000,000 Shares of Common Stock

Series I Warrants to Purchase Up to 5,000,000 Shares of Common Stock

Series II Warrants to Purchase Up to 5,000,000 Shares of Common Stock

PROSPECTUS SUPPLEMENT

Sole Book-Running Manager
LAZARD CAPITAL MARKETS

Co-Managers
BOENNING & SCATTERGOOD, INC.

GLOBAL HUNTER SECURITIES

February 16, 2011
