As filed pursuant to Rule 424(b)(5)
File No. 333-166404

PROSPECTUS SUPPLEMENT
(To prospectus dated May 11, 2010)

9,000,000 Shares

MannKind Corporation

Common Stock

This is an offering of 9,000,000 shares of common stock of MannKind Corporation. The shares of our common stock being offered hereby are shares that we will loan to Bank of America, N.A., which we refer to as the "share borrower" and which is an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated, the underwriter for this offering. These shares are referred to in this prospectus supplement as the "borrowed shares."

Our common stock is listed on the Nasdaq Global Market under the symbol "MNKD." On August 18, 2010, the last reported sale price of our common stock was $5.97 per share.

Investing in our common stock involves risks. See "Risk Factors" beginning on page S-9 of this prospectus supplement.

We have been informed by Merrill Lynch, Pierce, Fenner & Smith Incorporated that it, or its affiliates, intend to use the short position created by the share loan and the short sales of the borrowed shares effected in this offering for purposes reasonably designed to facilitate transactions by which investors in our 5.75% Senior Convertible Notes due 2015, which we refer to as our "convertible notes" and which are being offered in a concurrent offering to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended, or the Securities Act, may hedge their investments through short sales or privately negotiated derivative transactions. We will not receive any proceeds from the sale of the borrowed shares in this offering, but we will receive a one-time nominal lending fee of $0.01 per share from the share borrower for the use of the borrowed shares. The share borrower or its affiliates will receive all the proceeds from the sale of the borrowed shares. See "Description of Share Lending Agreement and Concurrent Offering of Our Convertible Notes" and "Underwriting" on pages S-36 and S-41, respectively, of this prospectus supplement.

The shares borrowed by the share borrower will be offered to the public at $5.55 per share.

The Securities and Exchange Commission and state securities regulators have not 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 delivery of the borrowed shares being offered hereby is contingent upon the closing of our convertible note offering. We expect that delivery of the borrowed shares will be made concurrently with the closing of our convertible note offering on or about August 24, 2010.

BofA Merrill Lynch

The date of this prospectus supplement is August 18, 2010.

Table of Contents

Prospectus Supplement

Prospectus

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, and any free writing prospectus that we authorize to be distributed to you in connection with this offering. We have not, and the share borrower and underwriter have not, authorized anyone to provide you with any information other than that contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, and any free writing prospectus that we authorize to be distributed to you in connection with this offering. We take

no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not, and the share borrower and underwriter are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus is accurate only as of the date on those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus when making your investment decision. You should also read and consider the information in the documents we have referred you to in the sections of the prospectus entitled "Where You Can Find More Information" and "Incorporation by Reference."

IMPORTANT INFORMATION ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. This prospectus supplement provides you with the specific details regarding this offering, including the number of shares to be offered, the price per share, and the risks of investing in our common stock. The accompanying prospectus provides you with more general information, some of which does not apply to this offering of our common stock. To the extent information in this prospectus supplement is inconsistent with the accompanying prospectus or any of the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, you should rely on this prospectus supplement. You should read and consider the information in this prospectus supplement, the accompanying prospectus, and any free writing prospectus, together with the additional information described under the headings "Where You Can Find More Information" and "Incorporation by Reference."

Unless the context otherwise requires, references to "MannKind" or the "Company," "we," "us," and "our" in this prospectus supplement and the accompanying prospectus mean MannKind Corporation and its wholly owned subsidiaries.

AFREZZA™ is our trademark and Technosphere® is our registered trademark in the United States. We have also applied for or registered company trademarks in other jurisdictions, including Europe and Japan. This prospectus supplement also include references to registered service marks and trademarks of other entities that are the property of their respective owners.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, including the documents that we incorporate by reference herein and therein, contain statements that are not strictly historical in nature and are forward-looking statements within the meaning of Section 27A of the Securities Act and within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements are subject to the "safe harbor" created by Section 27A of the Securities Act and Section 21E of the Exchange Act and may include, but are not limited to, statements about:

- the progress or success of our research, development and clinical programs, including the continued clinical development of AFREZZA and new inhalation systems for the treatment of diabetes;
- our efforts to apply for and receive regulatory approval to sell AFREZZA in the United States and other markets;
- our pursuit of sales and marketing collaborations for AFREZZA and development collaborations for our cancer immunotherapy and cancer drug programs;
- the timing of completion of enrollment in and interim analyses of data from our clinical trials, and the timing or success of the commercialization of AFREZZA, or any other products or therapies that we may develop;
- the timing of completion of our manufacturing installation and validation activities;
- the potential marketing, commercialization and achievement of market acceptance of AFREZZA or any other products or therapies that we may develop;
- our financing plans, including our common stock purchase arrangements with The Mann Group LLC and Seaside 88, LP and our concurrent convertible note offering; and
- our estimates for future performance, anticipated operating losses, future revenues, capital requirements and our needs for additional financing.

In some cases, you can identify forward-looking statements by terms such as "anticipates," "believes," "could," "estimates," "expects," "goal," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," the negative of these words and words or similar expressions intended to identify forward-looking statements. These statements reflect our views as of the date on which they were made with respect to future events and are based on assumptions and subject to risks and uncertainties. The underlying information and expectations are likely to change over time. Given these uncertainties, you should not place undue reliance on these forward-looking statements as actual events or results may differ materially from those projected in the forward-looking statements due to various factors, including, but not limited to, those set forth under the heading "Risk Factors" in this prospectus supplement, in the accompanying prospectus, and in our SEC filings. These forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

You should rely only on the information contained, or incorporated by reference, in this prospectus supplement, the accompanying prospectus, the registration statement of which this prospectus supplement is a part, the documents incorporated by reference herein, and any free writing prospectus that we authorize for use

in connection with this offering. You should also understand that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors discussed or incorporated by reference herein, in addition to the other information set forth in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference.

SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. For a more complete understanding of our company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference in this prospectus supplement and the accompanying prospectus, and the information included in any free writing prospectus that we have authorized for use in connection with this offering, including the information referred to under the heading "Risk Factors" in this prospectus supplement beginning on page S-9.

MANNKIND CORPORATION

Overview

We are a biopharmaceutical company focused on the discovery, development and commercialization of therapeutic products for diseases such as diabetes and cancer. Our lead product candidate, AFREZZA (insulin human [rDNA origin]) Inhalation Powder, is an ultra rapid-acting insulin that has completed Phase 3 clinical trials that evaluated its safety and efficacy in the treatment of diabetes. In March 2009, we submitted a new drug application, or NDA, to the U.S. Food and Drug Administration, or FDA, requesting approval of AFREZZA for the treatment of adults with type 1 or type 2 diabetes for the control of hyperglycemia. In March 2010, we received a Complete Response letter regarding this NDA from the FDA, seeking additional information about AFREZZA. In July 2010, the FDA accepted our Class 2 resubmission in response to the Complete Response letter and set a target action date of December 29, 2010. Our focus until then will be to work closely with the FDA as it evaluates our next-generation delivery system and the other information that we provided in our resubmission. We will also initiate the installation and validation of equipment in our Danbury, Connecticut manufacturing facility for filling the cartridges used in our next-generation inhaler. We expect that these activities will continue into the third quarter of 2011.

We are a development stage enterprise and have incurred significant losses since our inception in 1991. As of June 30, 2010, we have incurred a cumulative net loss of $1.7 billion and a stockholders' deficit of $137.7 million. To date, we have not generated any product revenues and have funded our operations primarily through the sale of equity securities and convertible debt securities and borrowings under a related party loan.

We have held extensive discussions with a number of pharmaceutical companies concerning a potential strategic business collaboration for AFREZZA and recently initiated partnership discussions with a number of pharmaceutical companies regarding our cancer immunotherapy and cancer drug programs. There can be no assurance that any such collaboration will be available to us on a timely basis or on acceptable terms, if at all.

We do not expect to record sales of any product prior to regulatory approval and commercialization of AFREZZA. We currently do not have the required approvals to market any of our product candidates, and we may not receive such approvals. We may not be profitable even if we succeed in commercializing any of our product candidates. There can be no assurance that we will obtain approval of AFREZZA on the FDA's target date or that we will complete the installation and validation of equipment in our manufacturing facility on our anticipated timeline. We expect to make substantial expenditures and to incur additional operating losses for at least the next several years as we:

- continue the clinical development of AFREZZA and new inhalation systems for the treatment of diabetes;

- seek regulatory approval to sell AFREZZA in the United States and other markets;
- seek sales and marketing collaborations for AFREZZA;
- seek development collaborations for our cancer immunotherapy and cancer drug programs; and
- develop additional applications of our proprietary Technosphere platform technology for the pulmonary delivery of other drugs.

Our business is subject to significant risks, including but not limited to the risks inherent in our ongoing clinical trials and the regulatory approval process, our potential inability to enter into sales and marketing collaborations to commercialize our lead product candidate in a timely manner, the results of our research and development efforts, competition from other products and technologies and uncertainties associated with obtaining and enforcing patent rights.

Recent Developments

On August 10, 2010, we entered into a common stock purchase agreement, or the Seaside purchase agreement, with Seaside 88, LP, or Seaside. The Seaside purchase agreement requires us to issue and sell, and Seaside to buy, up to 700,000 shares of our common stock once every 14 days, subject to the satisfaction of certain closing conditions at each closing, beginning on September 22, 2010 and ending approximately 50 weeks after the initial closing. The price of the shares that we sell to Seaside will be at an 8% discount to the volume weighted average trading price for our common stock for the ten consecutive trading days immediately preceding each closing date. For a particular closing to take place, the ten-day volume weighted average trading price for our common stock immediately prior to such closing must be at least $6.50 per share. If the ten-day volume weighted average trading price for a particular closing is below $6.50 per share, then that closing will not occur and the aggregate number of shares to be purchased will be reduced by 700,000 shares. Seaside also has the right not to complete a purchase of shares at a closing if it would cause Seaside's beneficial ownership of our common stock, calculated in accordance with Rule 13d-3 under the Exchange Act, to exceed 10% of our outstanding common stock immediately after such subsequent closing. Seaside has agreed not to engage in short sales of our common stock during the term of the Seaside purchase agreement and agreed that it will not sell more than 10% of the total number of shares of common stock traded on any trading day. On August 10, 2010, we entered into an agreement with Omni Capital Corporation to pay that firm a finder's fee in an amount equal to 1% of the aggregate value of all cash, if any, invested by Seaside under the Seaside purchase agreement.

On August 10, 2010, we also entered into a common stock purchase agreement, or the Mann purchase agreement, with The Mann Group LLC, an entity controlled by our chief executive officer and principal stockholder. Under the Mann purchase agreement, we are required to issue and sell, and The Mann Group is obligated to purchase, the same number of shares of our common stock that Seaside purchases at each closing under the Seaside purchase agreement. The price of the shares that we sell to The Mann Group under the Mann purchase agreement will be equal to the greater of $7.15 per share (the closing bid price of our common stock on August 10, 2010) and the closing bid price of our common stock on the trading day immediately preceding the applicable closing date. The aggregate purchase price for the shares of common stock we issue and sell to The Mann Group will be paid by cancelling an equal amount of the outstanding principal under an existing $350 million revolving loan arrangement provided by The Mann Group. At July 31, 2010, the principal amount outstanding under the loan arrangement was $252 million, and we had $98 million of available borrowings under the arrangement. On August 10, 2010, we also amended and restated the existing promissory note evidencing the loan arrangement with The Mann Group to extend the maturity date to December 31, 2012, to provide for the cancellation of indebtedness under the note as described above, to shorten the notice period from 180 days to 90 days (or the number of days to maturity of the note if less than 90 days) if The Mann Group requires us to prepay the note, and to eliminate our ability to reborrow under the note the amount of any indebtedness that is cancelled as described above.

Company Information

We were incorporated in the State of Delaware on February 14, 1991. Our principal executive offices are located at 28903 North Avenue Paine, Valencia, California 91355, and our telephone number at that address is (661) 775-5300. MannKind Corporation and the MannKind Corporation logo are our service marks. Our website address is http://www.mannkindcorp.com. The information contained in, and that can be accessed through, our website is not incorporated into and does not form a part of this prospectus supplement.

	THE OFFERING
Issuer	MannKind Corporation
Common stock offered by us in this offering	9,000,000 shares.
Common stock to be outstanding after this offering	122,674,221 shares (including 9,000,000 shares offered hereby).
Nasdaq Global Market symbol	MNKD
Risk factors	See “Risk Factors” beginning on page S-9 and other information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider carefully before deciding to invest in shares of our common stock.
Description of borrowing arrangement	The shares of our common stock offered hereby are shares that we are loaning to the share borrower pursuant to a share lending agreement between us and the share borrower, which we refer to as the “share lending agreement.” We have been informed by Merrill Lynch, Pierce, Fenner & Smith Incorporated that it, or its affiliates, intend to use the short position created by the share loan and the short sales of the borrowed shares effected in this offering for purposes reasonably designed to facilitate transactions by which investors in our convertible note offering may hedge their investments through short sales or privately negotiated derivative transactions.
Description of concurrent offering	Concurrently with this offering of borrowed shares, we are offering $100 million aggregate principal amount of our 5.75% Senior Convertible Notes due 2015 (or $110 million if the initial purchasers in the note offering exercise their overallotment option in full) by means of a separate and confidential offering memorandum. The convertible notes will not be registered under the Securities Act and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. This prospectus supplement is not an offer to sell nor a solicitation of an offer to buy our convertible notes, which offer is strictly limited to investors who are “qualified institutional buyers” (as defined in Rule 144A under the Securities Act) and that received a related offering memorandum from us or the initial purchasers of the notes. The delivery of the shares of common stock hereunder is contingent upon the closing of the concurrent offering of our convertible notes, and the closing of the offering of our convertible notes is contingent upon the delivery by us of the borrowed shares pursuant to the share lending agreement with the share borrower, an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated, the underwriter for this offering. See “Description of Share Lending Agreement and Concurrent Offering of Our Convertible Notes.”

Use of proceeds	We will not receive any proceeds from the sale of the borrowed shares in this offering, but we will receive a nominal one-time lending fee of $0.01 per share from the share borrower for the use of the shares. The share borrower or its affiliates will receive all the proceeds from the sale of the borrowed shares. See “Description of Share Lending Agreement and Concurrent Offering of Our Convertible Notes.”

The number of shares of our common stock to be outstanding immediately after the completion of this offering is based on 113,674,221 shares of our common stock outstanding as of June 30, 2010. Unless otherwise indicated, the number of shares of common stock presented in this prospectus supplement excludes, as of June 30, 2010:

- 6,210,883 shares of common stock issuable upon the exercise of outstanding stock options with a weighted average exercise price of $7.23 per share;
- 3,046,559 shares of common stock issuable upon the settlement of outstanding restricted stock units;
- 5,117,523 shares of common stock issuable upon the conversion of our outstanding 3.75% senior convertible notes due 2013 at a conversion price of approximately $22.47 per share and up to 1,484,064 shares issuable as make-whole premiums if the notes are converted in connection with certain fundamental changes;
- 2,882,873 shares of common stock reserved for issuance upon the exercise of outstanding warrants with a weighted average exercise price of $12.23 per share; and
- 8,295,091 shares of common stock available for future grant under our 2004 equity incentive plan, 2004 non-employee directors’ stock option plan and 2004 employee stock purchase plan.

The warrants to purchase up to 2,882,873 shares of common stock set forth above subsequently expired in August 2010.

Unless otherwise indicated, this prospectus supplement does not give effect to the transactions contemplated by the common stock purchase agreement between us and Seaside 88, the common stock purchase agreement between us and The Mann Group or the conversion of any convertible notes we may sell in the concurrent offering.

RISK FACTORS

You should consider carefully the risks described below, together with the other information in this prospectus supplement, the accompanying prospectus and the information and documents incorporated by reference in this prospectus supplement and the accompanying prospectus, as well as any free writing prospectus that we have authorized for use in connection with this offering, before you make a decision to invest in our common stock. If any of the risks described in the foregoing documents actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. These risks are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business operations.

Risks Related to Our Business

We Depend Heavily on the Successful Development and Commercialization of Our Lead Product Candidate, AFREZZA, Which Is Not Yet Approved, and Our Other Product Candidates, Which Are in Early Clinical or Preclinical Development.

To date, we have not commercialized any product candidates. In March 2009, we submitted an NDA to the FDA requesting approval of AFREZZA for the treatment of adults with type 1 or type 2 diabetes for the control of hyperglycemia. In March 2010, we received a Complete Response letter regarding this NDA from the FDA. A Complete Response letter is issued by the FDA's Center for Drug Evaluation and Research when the review of a submitted file is completed and questions remain that preclude the approval of the NDA in its current form. In July 2010, the FDA accepted our reply to the Complete Response letter and set a target action date of December 29, 2010. There can be no assurance that the FDA will find our proposed approach for addressing its questions acceptable. The FDA could also request that we conduct additional clinical trials to provide sufficient data for approval of the NDA. There can be no assurance that we will obtain approval of the NDA in a timely manner or at all.

Our other product candidates are generally in early clinical or preclinical development. We anticipate that in the near term, our ability to generate revenues will depend solely on the successful development and commercialization of AFREZZA.

We have expended significant time, money and effort in the development of our lead product candidate, AFREZZA, which has not yet received regulatory approval and which may not be approved by the FDA in a timely manner, or at all. We must receive the necessary approvals from the FDA and similar foreign regulatory agencies before AFREZZA can be marketed and sold in the United States or elsewhere. Even if we were to receive regulatory approval, we ultimately may be unable to gain market acceptance of AFREZZA for a variety of reasons, including the treatment and dosage regimen, potential adverse effects, the availability of alternative treatments and cost effectiveness. If we fail to commercialize AFREZZA, our business, financial condition and results of operations will be materially and adversely affected.

We are seeking to develop and expand our portfolio of product candidates through our internal research programs and through licensing or otherwise acquiring the rights to therapeutics in the areas of cancer and other indications. All of these product candidates will require additional research and development and significant preclinical, clinical and other testing prior to seeking regulatory approval to market them. Accordingly, these product candidates will not be commercially available for a number of years, if at all.

A significant portion of the research that we are conducting involves new and unproven compounds and technologies, including AFREZZA, Technosphere platform technology and immunotherapy product candidates. Research programs to identify new product candidates require substantial technical, financial and human resources. Even if our research programs identify candidates that initially show promise, these candidates may fail to progress to clinical development for any number of reasons, including discovery upon

further research that these candidates have adverse effects or other characteristics that indicate they are unlikely to be effective. In addition, the clinical results we obtain at one stage are not necessarily indicative of future testing results. If we fail to successfully complete the development and commercialization of AFREZZA or develop or expand our other product candidates, or are significantly delayed in doing so, our business and results of operations will be harmed and the value of our stock could decline.

We Have a History of Operating Losses, We Expect to Continue to Incur Losses and We May Never Become Profitable.

We are a development stage company with no commercial products. All of our product candidates are still being developed, and all but AFREZZA are still in the early stages of development. Our product candidates will require significant additional development, clinical trials, regulatory clearances and additional investment before they can be commercialized. We cannot be certain when AFREZZA may be approved, or if it will be approved.

We have never been profitable and, as of June 30, 2010, we had incurred a cumulative net loss of $1.7 billion. The cumulative net loss has resulted principally from costs incurred in our research and development programs, the write-off of goodwill and general operating expenses. We expect to make substantial expenditures and to incur increasing operating losses in the future in order to further develop and commercialize our product candidates, including costs and expenses to complete clinical trials, seek regulatory approvals and market our product candidates, including AFREZZA. This cumulative net loss may increase significantly as we continue development and clinical trial efforts.

Our losses have had, and are expected to continue to have, an adverse impact on our working capital, total assets and stockholders' equity. As of June 30, 2010, we had a stockholders' deficit of $137.7 million. Our ability to achieve and sustain profitability depends upon obtaining regulatory approvals for and successfully commercializing AFREZZA, either alone or with third parties. We do not currently have the required approvals to market any of our product candidates, and we may not receive them. We may not be profitable even if we succeed in commercializing any of our product candidates. As a result, we cannot be sure when we will become profitable, if at all.

If We Fail to Raise Additional Capital Our Financial Condition and Business Would Suffer.

It is costly to develop therapeutic product candidates and conduct clinical trials for these product candidates. Although we are currently focusing on AFREZZA as our lead product candidate, we have begun to conduct clinical trials for additional product candidates. Our existing capital resources will not be sufficient to support the expense of fully commercializing AFREZZA or developing any of our product candidates.

Based upon our current expectations, we believe that our existing capital resources, including the loan arrangement with The Mann Group LLC (an entity controlled by our principal stockholder) but excluding the net proceeds from our concurrent offering of the notes and any proceeds to us from our share purchase arrangements with The Mann Group LLC and Seaside, will enable us to continue planned operations through the first quarter of 2011. However, we cannot assure you that our plans will not change or that changed circumstances will not result in the depletion of our capital resources more rapidly than we currently anticipate. Accordingly, in addition to our concurrent offering of the notes, we may raise additional funds through the sale of equity or debt securities, the entry into strategic business collaborations, the establishment of other funding facilities, licensing arrangements and/or assets sales, in order to continue the development and commercialization of AFREZZA and other product candidates and to support our other ongoing activities. However, it may be difficult for us to raise additional funds through the sale of equity or debt securities. As of June 30, 2010, we had a stockholders' deficit of $137.7 million which may raise concerns about our solvency

and affect our ability to raise additional funds. The amount of additional funds we need will depend on a number of factors, including:

- the rate of progress and costs of our clinical trials and research and development activities, including costs of procuring clinical materials and expanding our own manufacturing facilities;
- our success in establishing strategic business collaborations and the timing and amount of any payments we might receive from any collaboration we are able to establish;
- actions taken by the FDA and other regulatory authorities affecting our products and competitive products;
- our degree of success in commercializing AFREZZA;
- the emergence of competing technologies and products and other adverse market developments;
- the timing and amount of payments we might receive from potential licensees;
- the costs of preparing, filing, prosecuting, maintaining and enforcing patent claims and other intellectual property rights or defending against claims of infringement by others;
- the costs of discontinuing projects and technologies or decommissioning existing facilities, if we undertake those activities; and
- the costs of performing additional clinical trials to demonstrate safety and efficacy if our current trials do not deliver results sufficient for FDA approval and commercialization.

We have raised capital in the past primarily through the sale of equity and debt securities. We may in the future pursue the sale of additional equity and/or debt securities, or the establishment of other funding facilities. For example, on August 10, 2010, we entered into the Seaside purchase agreement and the Mann purchase agreement for the sale and issuance by us of up to 36,400,000 shares of our common stock over a period of approximately 50 weeks. Issuances of additional debt or equity securities or the conversion of any of our currently outstanding convertible debt securities into shares of our common stock could impact the rights of the holders of our common stock and may dilute their ownership percentage. Moreover, the establishment of other funding facilities may impose restrictions on our operations. These restrictions could include limitations on additional borrowing and specific restrictions on the use of our assets, as well as prohibitions on our ability to create liens, pay dividends, redeem our stock or make investments.

We also may seek to raise additional capital by pursuing opportunities for the licensing or sale of certain intellectual property and other assets, including our Technosphere technology platform. We cannot offer assurances, however, that any strategic collaborations, sales of securities or sales or licenses of assets will be available to us on a timely basis or on acceptable terms, if at all. We may be required to enter into relationships with third parties to develop or commercialize products or technologies that we otherwise would have sought to develop independently, and any such relationships may not be on terms as commercially favorable to us as might otherwise be the case.

In the event that sufficient additional funds are not obtained through strategic collaboration opportunities, sales of securities, credit facilities, licensing arrangements and/or asset sales on a timely basis, we may be required to reduce expenses through the delay, reduction or curtailment of our projects, including AFREZZA commercialization, or further reduction of costs for facilities and administration. Moreover, if we do not obtain such additional funds, there will be substantial doubt about our ability to continue as a going concern and increased risk of insolvency and loss of investment to the holders of our securities. As of the date hereof, we have not obtained a solvency opinion or otherwise conducted a valuation of our properties to

determine whether our debts exceed the fair value of our property within the meaning of applicable solvency laws. If we are or become insolvent, investors in our stock may lose the entire value of their investment.

Deteriorating Global Economic Conditions May Have an Adverse Impact on the Loan Facility with an Entity Controlled by Our Principal Stockholder, Which We Currently Cannot Predict.

As widely reported, financial markets in the United States, Europe and Asia have been experiencing a period of unprecedented turmoil and upheaval characterized by extreme volatility and declines in security prices, severely diminished liquidity and credit availability, inability to access capital markets, the bankruptcy, failure, collapse or sale of various financial institutions and an unprecedented level of intervention from the United States federal government and other governments. We cannot predict the impact of these events on the loan facility with an entity controlled by our principal stockholder. If we are unable to draw on this financial resource, our business and financial condition will be adversely affected.

If We Do Not Achieve Our Projected Development and Commercialization Goals in the Timeframes We Announce and Expect, Our Business Would be Harmed and the Market Price of Our Common Stock Could Decline.

For planning purposes, we estimate the timing of the accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of scientific studies and clinical trials and the submission of regulatory filings. From time to time, we publicly announce the expected timing of some of these milestones. All of these milestones are based on a variety of assumptions. The actual timing of the achievement of these milestones can vary dramatically from our estimates, in many cases for reasons beyond our control, depending on numerous factors, including:

- the rate of progress, costs and results of our clinical trial and research and development activities, which will be impacted by the level of proficiency and experience of our clinical staff;
- our ability to identify and enroll patients who meet clinical trial eligibility criteria;
- our ability to access sufficient, reliable and affordable supplies of components used in the manufacture of our product candidates, including insulin and other materials for AFREZZA;
- the costs of expanding and maintaining manufacturing operations, as necessary;
- the extent of scheduling conflicts with participating clinicians and clinical institutions;
- the receipt of approvals by our competitors and by us from the FDA and other regulatory agencies;
- our ability to enter into sales and marketing collaborations for AFREZZA; and
- other actions by regulators.

In addition, if we do not obtain sufficient additional funds through sales of securities, strategic collaborations or the license or sale of certain of our assets on a timely basis, we may be required to reduce expenses by delaying, reducing or curtailing our development of AFREZZA or other product development activities, which would impact our ability to meet milestones. If we fail to commence or complete, or experience delays in or are forced to curtail, our proposed clinical programs or otherwise fail to adhere to our projected development goals in the timeframes we announce and expect (or within the timeframes expected by analysts or investors), our business and results of operations will be harmed and the market price of our common stock may decline.

We Face Substantial Competition in the Development of Our Product Candidates and May Not Be Able to Compete Successfully, and Our Product Candidates May Be Rendered Obsolete by Rapid Technological Change.

A number of established pharmaceutical companies have or are developing technologies for the treatment of diabetes. We also face substantial competition for the development of our other product candidates.

Many of our existing or potential competitors have, or have access to, substantially greater financial, research and development, production, and sales and marketing resources than we do and have a greater depth and number of experienced managers. As a result, our competitors may be better equipped than we are to develop, manufacture, market and sell competing products. In addition, gaining favorable reimbursement is critical to the success of AFREZZA. Many of our competitors have existing infrastructure and relationships with managed care organizations and reimbursement authorities which can be used to their advantage.

The rapid rate of scientific discoveries and technological changes could result in one or more of our product candidates becoming obsolete or noncompetitive. Our competitors may develop or introduce new products that render our technology and AFREZZA less competitive, uneconomical or obsolete. Our future success will depend not only on our ability to develop our product candidates but to improve them and keep pace with emerging industry developments. We cannot assure you that we will be able to do so.

We also expect to face increasing competition from universities and other non-profit research organizations. These institutions carry out a significant amount of research and development in the areas of diabetes and cancer. These institutions are becoming increasingly aware of the commercial value of their findings and are more active in seeking patent and other proprietary rights as well as licensing revenues.

If We Fail to Enter into a Strategic Collaboration with Respect to AFREZZA, We May Not Be Able to Execute on Our Business Model.

We have held extensive discussions with a number of pharmaceutical companies concerning a potential strategic business collaboration for AFREZZA. To date we have not reached an agreement with any of these companies on a collaboration. We cannot predict when, if ever, we could conclude an agreement with a partner. There can be no assurance that any such collaboration will be available to us on a timely basis or on acceptable terms. If we are not able to enter into a collaboration on terms that are favorable to us, we may be unable to undertake and fund product development, clinical trials, manufacturing and marketing activities at our own expense. Accordingly, we may have to substantially reduce our development efforts, which would delay or otherwise impede the commercialization of AFREZZA.

We will face similar challenges as we seek to develop our other product candidates. Our current strategy for developing, manufacturing and commercializing our other product candidates includes evaluating the potential for collaborating with pharmaceutical and biotechnology companies at some point in the drug development process and for these collaborators to undertake the advanced clinical development and commercialization of our product candidates. It may be difficult for us to find third parties that are willing to enter into collaborations on economic terms that are favorable to us, or at all. Failure to enter into a collaboration with respect to any other product candidate could substantially increase our requirements for capital and force us to substantially reduce our development effort.

If We Enter into Collaborative Agreements With Respect to AFREZZA and if Our Third-Party Collaborators Do Not Perform Satisfactorily or if Our Collaborations Fail, Development or Commercialization of AFREZZA May be Delayed and Our Business Could Be Harmed.

We may enter into license agreements, partnerships or other collaborative arrangements to support the financing, development and marketing of AFREZZA. We may also license technology from others to enhance

or supplement our technologies. These various collaborators may enter into arrangements that would make them potential competitors. These various collaborators also may breach their agreements with us and delay our progress or fail to perform under their agreements, which could harm our business.

If we enter into collaborative arrangements, we will have less control over the timing, planning and other aspects of our clinical trials, and the sale and marketing of AFREZZA and our other product candidates. We cannot offer assurances that we will be able to enter into satisfactory arrangements with third parties as contemplated or that any of our existing or future collaborations will be successful.

Continued Testing of AFREZZA or Our Other Product May Not Yield Successful Results, and Even if It Does, We May Still Be Unable to Commercialize Our Product.

Our research and development programs are designed to test the safety and efficacy of AFREZZA and our other product candidates through extensive nonclinical and clinical testing. We may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of AFREZZA or any of our other product candidates, including the following:

- safety and efficacy results obtained in our nonclinical and initial clinical testing may be inconclusive or may not be predictive of results obtained in later-stage clinical trials or following long-term use, and we may as a result be forced to stop developing product candidates that we currently believe are important to our future;
- the data collected from clinical trials of our product candidates may not be sufficient to support FDA or other regulatory approval;
- after reviewing test results, we or any potential collaborators may abandon projects that we previously believed were promising; and
- our product candidates may not produce the desired effects or may result in adverse health effects or other characteristics that preclude regulatory approval or limit their commercial use if approved.

Forecasts about the effects of the use of drugs, including AFREZZA, over terms longer than the clinical trials or in much larger populations may not be consistent with the clinical results. If use of AFREZZA results in adverse health effects or reduced efficacy or both, the FDA or other regulatory agencies may terminate our ability to market and sell AFREZZA, may narrow the approved indications for use or otherwise require restrictive product labeling or marketing, or may require further clinical trials, which may be time-consuming and expensive and may not produce favorable results.

As a result of any of these events, we, any collaborator, the FDA, or any other regulatory authorities, may suspend or terminate clinical trials or marketing of AFREZZA at any time. Any suspension or termination of our clinical trials or marketing activities may harm our business and results of operations and the market price of our common stock may decline.

If We Are Unable to Transition Successfully from a Development Company to a Company that Commercializes Therapeutics, Our Business Would Suffer.

We require a well-structured plan to make the transition from the development stage to being a company with commercial operations. In order to implement our commercialization strategy, we will need to:

- align our management structure to accommodate the increasing complexity of our operations;

- develop comprehensive and detailed commercialization, clinical development and regulatory plans; and
- implement standard operating procedures.

If we are unable to accomplish these measures in a timely manner, we would be at considerable risk of failing to develop the capabilities necessary for commercial operations.

If Our Suppliers Fail to Deliver Materials and Services Needed for the Production of AFREZZA in a Timely and Sufficient Manner, or They Fail to Comply with Applicable Regulations, Our Business and Results of Operations Would Be Harmed and the Market Price of Our Common Stock Could Decline.

For AFREZZA to be commercially viable, we need access to sufficient, reliable and affordable supplies of insulin, our AFREZZA inhaler, the related cartridges and other materials. We have a long-term agreement with N.V. Organon for the supply of insulin. In June 2009, we purchased from Pfizer, a portion of its inventory of bulk insulin and acquired an option to purchase the remainder of Pfizer's insulin inventory, in whole or in part, at a specified price to the extent that Pfizer has not otherwise disposed of or used the retained insulin.

We obtain FDKP, the precursor raw material for AFREZZA, from a major multinational chemical manufacturer. We have completed a successful validation campaign of FDKP at commercial scale. We can also utilize our in-house chemical manufacturing plant for supplemental capacity. We believe our contract manufacturer has the capacity to supply our current and future commercial requirements. We obtain our intended commercial AFREZZA inhaler and cartridges from a plastic molding company located in the United States.

We must rely on our suppliers to comply with relevant regulatory and other legal requirements, including the production of insulin in accordance with the FDA's current good manufacturing practices, or cGMP for drug products, and the production of the AFREZZA inhaler and related cartridges in accordance with Quality System Regulations, or QSR. The supply of any of these materials may be limited or any of the manufacturers may not meet relevant regulatory requirements, and if we are unable to obtain any of these materials in sufficient amounts, in a timely manner and at reasonable prices, or if we should encounter delays or difficulties in our relationships with manufacturers or suppliers, the development or manufacturing of AFREZZA may be delayed. Any such events could delay market introduction and subsequent sales of AFREZZA and, if so, our business and results of operations will be harmed and the market price of our common stock may decline.

We Have Never Manufactured AFREZZA or any Other Product Candidates in Commercial Quantities, and if We Fail to Develop an Effective Manufacturing Capability for Our Product Candidates or to Engage Third-Party Manufacturers with this Capability, We May Be Unable to Commercialize These Products.

We use our Danbury facility to formulate AFREZZA, fill plastic cartridges with AFREZZA and blister package the cartridges for use in our clinical trials. This facility has been fully qualified and undergone inspection by the FDA. The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in production, especially in scaling up initial production. These problems include difficulties with production costs and yields, quality control and assurance and shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. If we engage a third-party manufacturer, we would need to transfer our technology to that third-party manufacturer and gain FDA approval, potentially causing delays in product delivery. In addition, our third-party manufacturer may not perform as agreed or may terminate its agreement with us.

Additionally, when we manufacture commercial material on a significantly larger production scale than the production scale for clinical trial materials, we are required by the FDA to establish that the results obtained from the clinical trials may reasonably be extrapolated to such commercial material. We have submitted documentation to the FDA to show correlation to the clinical-scale production materials but can provide no assurance that approval will be obtained.

Any of these factors could cause us to delay or suspend clinical trials, regulatory submissions, required approvals or commercialization of our product candidates, entail higher costs and result in our being unable to effectively commercialize our products. Furthermore, if we or a third-party manufacturer fail to deliver the required commercial quantities of any product on a timely basis, and at commercially reasonable prices and acceptable quality, and we were unable to promptly find one or more replacement manufacturers capable of production at a substantially equivalent cost, in substantially equivalent volume and quality on a timely basis, we would likely be unable to meet demand for such products and we would lose potential revenues.

We Deal with Hazardous Materials and Must Comply with Environmental Laws and Regulations, which Can Be Expensive and Restrict How We Do Business.

Our research and development work involves the controlled storage and use of hazardous materials, including chemical, radioactive and biological materials. In addition, our manufacturing operations involve the use of a chemical that is stable and non-hazardous under normal storage conditions, but may form an explosive mixture under certain conditions. Our operations also produce hazardous waste products. We are subject to federal, state and local laws and regulations governing how we use, manufacture, store, handle and dispose of these materials. Moreover, the risk of accidental contamination or injury from hazardous materials cannot be completely eliminated, and in the event of an accident, we could be held liable for any damages that may result, and any liability could fall outside the coverage or exceed the limits of our insurance. Currently, our general liability policy provides coverage up to $1 million per occurrence and $2 million in the aggregate and is supplemented by an umbrella policy that provides a further $4 million of coverage; however, our insurance policy excludes pollution coverage and we do not carry a separate hazardous materials policy. In addition, we could be required to incur significant costs to comply with environmental laws and regulations in the future. Finally, current or future environmental laws and regulations may impair our research, development or production efforts.

When we purchased the facilities located in Danbury, Connecticut in 2001, there was a soil cleanup plan in process. As part of the purchase, we obtained an indemnification from the seller related to the remediation of the soil for all known environmental conditions that existed at the time the seller acquired the property. The seller is, in turn, indemnified for these known environmental conditions by the previous owner. We also received an indemnification from the seller for environmental conditions created during its ownership of the property and for environmental problems unknown at the time that the seller acquired the property. These additional indemnities are limited to the purchase price that we paid for the Danbury facilities.

During the construction of our expanded manufacturing facility, we completed the final stages of the soil cleanup plan in the third quarter of 2008, at a cost of approximately $2.25 million. We have reached an agreement with the party responsible for their contribution to past clean-up costs and were reimbursed $1.625 million in July 2010. The responsible party has agreed to pay for or indemnify us for any future costs and expenses directly related to the final closure of the environmental remediation. If we are unable to collect these future costs and expenses, if any, from the responsible party, our business and results of operations may be harmed.

If We Fail to Enter into Collaborations with Third Parties, We Would Be Required to Establish Our Own Sales, Marketing and Distribution Capabilities, Which Could Impact the Commercialization of Our Products and Harm Our Business.

Our products are intended to be used by a large number of healthcare professionals who will require substantial education and support. For example, a broad base of physicians, including primary care physicians and endocrinologists, treat patients with diabetes. A large sales force will be required in order to educate these physicians about the benefits and advantages of AFREZZA and to provide adequate support for them. Therefore, we plan to enter into collaborations with one or more pharmaceutical companies to market, distribute and sell AFREZZA, if it is approved. If we fail to enter into collaborations, we would be required to establish our own direct sales, marketing and distribution capabilities. Establishing these capabilities can be time-consuming and expensive and would delay our ability to commercialize AFREZZA. Because we lack experience in selling pharmaceutical products to the diabetes market, we would be at a disadvantage compared to our potential competitors, all of whom have substantially more resources and experience than we do. For example, several other companies selling products to treat diabetes have existing sales forces in excess of 1,500 sales representatives. We, acting alone, would not initially be able to field a sales force as large as our competitors or provide the same degree of marketing support. Also, we would not be able to match our competitor's spending levels for pre-launch marketing preparation, including medical education. We cannot assure you that we will succeed in entering into acceptable collaborations, that any such collaboration will be successful or, if not, that we will successfully develop our own sales, marketing and distribution capabilities.

If any Product that We May Develop Does Not Become Widely Accepted by Physicians, Patients, Third-Party Payers and the Healthcare Community, We May Be Unable to Generate Significant Revenue, if Any.

AFREZZA and our other product candidates are new and unproven. Even if any of our product candidates obtain regulatory approval, they may not gain market acceptance among physicians, patients, third-party payers and the healthcare community. Failure to achieve market acceptance would limit our ability to generate revenue and would adversely affect our results of operations.

The degree of market acceptance of AFREZZA and our other product candidates will depend on many factors, including the:

- claims for which FDA approval can be obtained, including superiority claims;
- perceived advantages and disadvantages of competitive products;
- willingness of the healthcare community and patients to adopt new technologies;
- ability to manufacture the product in sufficient quantities with acceptable quality and cost;
- perception of patients and the healthcare community, including third-party payers, regarding the safety, efficacy and benefits compared to competing products or therapies;
- convenience and ease of administration relative to existing treatment methods;
- pricing and reimbursement relative to other treatment therapeutics and methods; and
- marketing and distribution support.

Because of these and other factors, any product that we may develop may not gain market acceptance, which would materially harm our business, financial condition and results of operations.

If Third-Party Payers Do Not Reimburse Consumers for Our Products, Our Products Might Not Be Used or Purchased, which Would Adversely Affect Our Revenues.

Our future revenues and potential for profitability may be affected by the continuing efforts of governments and third-party payers to contain or reduce the costs of healthcare through various means. For example, in certain foreign markets the pricing of prescription pharmaceuticals is subject to governmental control. In the United States, there has been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental controls. We cannot be certain what legislative proposals will be adopted or what actions federal, state or private payers for healthcare goods and services may take in response to any drug pricing reform proposals or legislation. Such reforms may make it difficult to complete the development and testing of AFREZZA and our other product candidates, and therefore may limit our ability to generate revenues from sales of our product candidates and achieve profitability. Further, to the extent that such reforms have a material adverse effect on the business, financial condition and profitability of other companies that are prospective collaborators for some of our product candidates, our ability to commercialize our product candidates under development may be adversely affected.

In the United States and elsewhere, sales of prescription pharmaceuticals still depend in large part on the availability of reimbursement to the consumer from third-party payers, such as governmental and private insurance plans. Third-party payers are increasingly challenging the prices charged for medical products and services. In addition, because each third-party payer individually approves reimbursement, obtaining these approvals is a time-consuming and costly process. We would be required to provide scientific and clinical support for the use of any product to each third-party payer separately with no assurance that approval would be obtained. This process could delay the market acceptance of any product and could have a negative effect on our future revenues and operating results. Even if we succeed in bringing one or more products to market, we cannot be certain that any such products would be considered cost-effective or that reimbursement to the consumer would be available, in which case our business and results of operations would be harmed and the market price of our common stock could decline.

If Product Liability Claims Are Brought Against Us, We May Incur Significant Liabilities and Suffer Damage to Our Reputation.

The testing, manufacturing, marketing and sale of AFREZZA and our other product candidates expose us to potential product liability claims. A product liability claim may result in substantial judgments as well as consume significant financial and management resources and result in adverse publicity, decreased demand for a product, injury to our reputation, withdrawal of clinical trial volunteers and loss of revenues. We currently carry worldwide liability insurance in the amount of $10 million. We believe these limits are reasonable to cover us from potential damages arising from current and previous clinical trials of AFREZZA. In addition, we carry local policies per trial in each country in which we conduct clinical trials that require us to carry coverage based on local statutory requirements. We intend to obtain product liability coverage for commercial sales in the future if AFREZZA is approved. However, we may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise, and because insurance coverage in our industry can be very expensive and difficult to obtain, we cannot assure you that we will be able to obtain sufficient coverage at an acceptable cost, if at all. If losses from such claims exceed our liability insurance coverage, we may ourselves incur substantial liabilities. If we are required to pay a product liability claim our business and results of operations would be harmed and the market price of our common stock may decline.

If We Lose Any Key Employees or Scientific Advisors, Our Operations and Our Ability to Execute Our Business Strategy Could Be Materially Harmed.

In order to commercialize our product candidates successfully, we will be required to expand our work force, particularly in the areas of manufacturing, clinical trials management, regulatory affairs, business development, and sales and marketing. These activities will require the addition of new personnel, including management, and the development of additional expertise by existing personnel. We face intense competition

for qualified employees among companies in the biotechnology and biopharmaceutical industries. Our success depends upon our ability to attract, retain and motivate highly skilled employees. We may be unable to attract and retain these individuals on acceptable terms, if at all.

The loss of the services of any principal member of our management and scientific staff could significantly delay or prevent the achievement of our scientific and business objectives. All of our employees are "at will" and we currently do not have employment agreements with any of the principal members of our management or scientific staff, and we do not have key person life insurance to cover the loss of any of these individuals. Replacing key employees may be difficult and time-consuming because of the limited number of individuals in our industry with the skills and experience required to develop, gain regulatory approval of and commercialize our product candidates successfully.

We have relationships with scientific advisors at academic and other institutions to conduct research or assist us in formulating our research, development or clinical strategy. These scientific advisors are not our employees and may have commitments to, and other obligations with, other entities that may limit their availability to us. We have limited control over the activities of these scientific advisors and can generally expect these individuals to devote only limited time to our activities. Failure of any of these persons to devote sufficient time and resources to our programs could harm our business. In addition, these advisors are not prohibited from, and may have arrangements with, other companies to assist those companies in developing technologies that may compete with our product candidates.

If Our Chief Executive Officer Is Unable to Devote Sufficient Time and Attention to Our Business, Our Operations and Our Ability to Execute Our Business Strategy Could Be Materially Harmed.

Alfred Mann, our Chairman and Chief Executive Officer, is involved in many other business and charitable activities. As a result, the time and attention Mr. Mann devotes to the operation of our business varies, and he may not expend the same time or focus on our activities as other, similarly situated chief executive officers. If Mr. Mann is unable to devote the time and attention necessary to running our business, we may not be able to execute our business strategy and our business could be materially harmed.

If Our Internal Controls Over Financial Reporting Are Not Considered Effective, Our Business and Stock Price could Be Adversely Affected.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to evaluate the effectiveness of our internal controls over financial reporting as of the end of each fiscal year, and to include a management report assessing the effectiveness of our internal controls over financial reporting in our annual report on Form 10-K for that fiscal year. Section 404 also requires our independent registered public accounting firm to attest to, and report on, our internal controls over financial reporting.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our internal controls over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud involving a company have been, or will be, detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and we cannot assure you that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. We cannot assure you that we or our independent registered public accounting firm will not identify a material weakness in our internal controls in the future. A material weakness in our internal controls over financial reporting would require management

and our independent registered public accounting firm to evaluate our internal controls as ineffective. If our internal controls over financial reporting are not considered effective, we may experience a loss of public confidence, which could have an adverse effect on our business and on the market price of our common stock.

Risks Related to Regulatory Approvals

Our Product Candidates Must Undergo Rigorous Nonclinical and Clinical Testing and We Must Obtain Regulatory Approvals, Which Could Be Costly and Time-Consuming and Subject Us to Unanticipated Delays or Prevent Us from Marketing any Products.

Our research and development activities, as well as the manufacturing and marketing of our product candidates, including AFREZZA, are subject to regulation, including regulation for safety, efficacy and quality, by the FDA in the United States and comparable authorities in other countries. FDA regulations and the regulations of comparable foreign regulatory authorities are wide-ranging and govern, among other things:

- product design, development, manufacture and testing;
- product labeling;
- product storage and shipping;
- pre-market clearance or approval;
- advertising and promotion; and
- product sales and distribution.

Clinical testing can be costly and take many years, and the outcome is uncertain and susceptible to varying interpretations. We cannot be certain if or when the FDA might request additional studies, under what conditions such studies might be requested, or what the size or length of any such studies might be. The clinical trials of our product candidates may not be completed on schedule, the FDA or foreign regulatory agencies may order us to stop or modify our research, or these agencies may not ultimately approve any of our product candidates for commercial sale. The data collected from our clinical trials may not be sufficient to support regulatory approval of our various product candidates, including AFREZZA. Even if we believe the data collected from our clinical trials are sufficient, the FDA has substantial discretion in the approval process and may disagree with our interpretation of the data. Our failure to adequately demonstrate the safety and efficacy of any of our product candidates would delay or prevent regulatory approval of our product candidates, which could prevent us from achieving profitability.

The requirements governing the conduct of clinical trials and manufacturing and marketing of our product candidates, including AFREZZA, outside the United States vary widely from country to country. Foreign approvals may take longer to obtain than FDA approvals and can require, among other things, additional testing and different clinical trial designs. Foreign regulatory approval processes include essentially all of the risks associated with the FDA approval processes. Some of those agencies also must approve prices of the products. Approval of a product by the FDA does not ensure approval of the same product by the health authorities of other countries. In addition, changes in regulatory policy in the United States or in foreign countries for product approval during the period of product development and regulatory agency review of each submitted new application may cause delays or rejections.

The process of obtaining FDA and other required regulatory approvals, including foreign approvals, is expensive, often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. We are not aware of any precedent for the successful commercialization of products based on our technology. In January 2006, the FDA approved the first pulmonary insulin product, Exubera.

This approval has had an impact on and, notwithstanding the voluntary withdrawal of the product from the market by its manufacturer, could still impact the development and registration of AFREZZA in different ways. For example, Exubera may be used as a reference for safety and efficacy evaluations of AFREZZA, and the approval standards set for Exubera may be applied to other products that follow, including AFREZZA.

In March 2009, we submitted an NDA for AFREZZA. The FDA has advised us that it will regulate AFREZZA as a "combination product" because of the complex nature of the system that includes the combination of a new drug (AFREZZA) and a new medical device (the AFREZZA inhaler used to administer the insulin). The FDA's review of our NDA for AFREZZA involves several separate review groups of the FDA including: (1) the Metabolic and Endocrine Drug Products Division; (2) the Pulmonary Drug Products Division; and (3) the Center for Devices and Radiological Health, which reviews medical devices. The Metabolic and Endocrine Drug Products Division is the lead group and obtains consulting reviews from the other two FDA groups. We can make no assurances at this time about what impact FDA review by multiple groups will have on the approvability of our product.

In March 2010, we received a Complete Response letter regarding this NDA from the FDA. A Complete Response letter is issued by the FDA's Center for Drug Evaluation and Research when the review of a submitted file is completed and questions remain that preclude the approval of the NDA in its current form. In July 2010, the FDA accepted our reply to the Complete Response letter and set a target action date of December 29, 2010. There can be no assurance that the FDA will find our proposed approach for addressing its questions acceptable. The FDA could also request that we conduct additional clinical trials to provide sufficient data for approval of the NDA. There can be no assurance that we will obtain approval of the NDA in a timely manner or at all.

Also, questions that have been raised about the safety of marketed drugs generally, including pertaining to the lack of adequate labeling, may result in increased cautiousness by the FDA in reviewing new drugs based on safety, efficacy, or other regulatory considerations and may result in significant delays in obtaining regulatory approvals. Such regulatory considerations may also result in the imposition of more restrictive drug labeling or marketing requirements as conditions of approval, which may significantly affect the marketability of our drug products. FDA review of AFREZZA as a combination product may lengthen the product development and regulatory approval process, increase our development costs and delay or prevent the commercialization of AFREZZA.

We are developing AFREZZA as a new treatment for diabetes utilizing unique, proprietary components. As a combination product, any changes to either the AFREZZA inhaler, or AFREZZA, including new suppliers, could possibly result in FDA requirements to repeat certain clinical studies. For example, we plan to launch AFREZZA with our next-generation inhaler rather than the device that was used in pivotal clinical studies, and in our July 2010 reply to the FDA's Complete Response letter, we submitted information on the comparability of our next-generation inhaler to the device that was used in pivotal clinical studies. As a result of our change to our next-generation inhaler, the FDA could yet require us to undertake additional clinical trials and other studies, which could significantly delay the development and commercialization of AFREZZA. Our product candidates that are currently in development for the treatment of cancer also face similar obstacles and costs.

We also must obtain final approval from the FDA for the trade name of our product. In September 2009, we proposed AFREZZA as a trade name, which the FDA found conditionally acceptable in December 2009.

We Have Only Limited Experience in Filing and Pursuing Applications Necessary to Gain Regulatory Approvals, which May Impede Our Ability to Obtain Timely Approvals from the FDA or Foreign Regulatory Agencies, If at All.

We will not be able to commercialize AFREZZA or any other product candidates until we have obtained regulatory approval. Until we prepared and submitted our NDA for AFREZZA, we had no experience as a company in late-stage regulatory filings, such as preparing and submitting NDAs, which may place us at risk of delays, overspending and human resources inefficiencies. Any delay in obtaining, or inability to obtain, regulatory approval could harm our business.

If We Do Not Comply with Regulatory Requirements at any Stage, Whether Before or After Marketing Approval Is Obtained, We May Be Subject to Criminal Prosecution, Fined or Forced to Remove a Product from the Market or Experience Other Adverse Consequences, Including Restrictions or Delays in Obtaining Regulatory Marketing Approval.

Even if we comply with regulatory requirements, we may not be able to obtain the labeling claims necessary or desirable for product promotion. We may also be required to undertake post-marketing trials. In addition, if we or other parties identify adverse effects after any of our products are on the market, or if manufacturing problems occur, regulatory approval may be withdrawn and a reformulation of our products, additional clinical trials, changes in labeling of, or indications of use for, our products and/or additional marketing applications may be required. If we encounter any of the foregoing problems, our business and results of operations will be harmed and the market price of our common stock may decline.

Even if We Obtain Regulatory Approval for Our Product Candidates, Such Approval May Be Limited and We Will Be Subject to Stringent, Ongoing Government Regulation.

Even if regulatory authorities approve any of our product candidates, they could approve less than the full scope of uses or labeling that we seek or otherwise require special warnings or other restrictions on use or marketing or could require potentially costly post-marketing follow-up clinical trials. Regulatory authorities may limit the segments of the diabetes population to which we or others may market AFREZZA or limit the target population for our other product candidates. Based on currently available clinical studies, we believe that AFREZZA may have certain advantages over currently approved insulin products including its approximation of the natural early insulin secretion normally seen in healthy individuals following the beginning of a meal. Nonetheless, there are no assurances that these or any other advantages of AFREZZA will be agreed to by the FDA or otherwise included in product labeling or advertising and, as a result, AFREZZA may not have our expected competitive advantages when compared to other insulin products.

The manufacture, marketing and sale of any of our product candidates will be subject to stringent and ongoing government regulation. The FDA may also withdraw product approvals if problems concerning safety or efficacy of a product occurs following approval. We cannot be sure that FDA and United States Congressional initiatives pertaining to ensuring the safety of marketed drugs or other developments pertaining to the pharmaceutical industry will not adversely affect our operations.

We also are required to register our establishments and list our products with the FDA and certain state agencies. We and any third-party manufacturers or suppliers must continually adhere to federal regulations setting forth requirements, known as cGMP (for drugs) and QSR (for medical devices), and their foreign equivalents, which are enforced by the FDA and other national regulatory bodies through their facilities inspection programs. If our facilities, or the facilities of our manufacturers or suppliers, cannot pass a preapproval plant inspection, the FDA will not approve the marketing of our product candidates. In complying with cGMP and foreign regulatory requirements, we and any of our potential third-party manufacturers or suppliers will be obligated to expend time, money and effort in production, record-keeping and quality control to ensure that our products meet applicable specifications and other requirements. QSR requirements also impose extensive testing, control and documentation requirements. State regulatory agencies and the regulatory

agencies of other countries have similar requirements. In addition, we will be required to comply with regulatory requirements of the FDA, state regulatory agencies and the regulatory agencies of other countries concerning the reporting of adverse events and device malfunctions, corrections and removals (*e.g.*, recalls), promotion and advertising and general prohibitions against the manufacture and distribution of adulterated and misbranded devices. Failure to comply with these regulatory requirements could result in civil fines, product seizures, injunctions and/or criminal prosecution of responsible individuals and us. Any such actions would have a material adverse effect on our business and results of operations.

Our Insulin Supplier Does Not Yet Supply Human Recombinant Insulin for an FDA-Approved Product.

Our insulin supplier for purposes of the AFREZZA NDA sells its product outside of the United States. The FDA has inspected this supplier and found it to be acceptable. If we were required to find a new or additional supplier of insulin, we would be required to evaluate the new supplier's ability to provide insulin that meets our specifications and quality requirements, which would require significant time and expense and could delay the manufacturing and future commercialization of AFREZZA. We also depend on suppliers for other materials that comprise AFREZZA, including our AFREZZA inhaler and cartridges. Each device supplier must comply with relevant regulatory requirements including QSR and is subject to inspection by the FDA. There can be no assurance, in the conduct of an inspection of any of our suppliers, that the agency would find that the supplier substantially complies with the QSR or cGMP requirements, where applicable. If we or any potential third-party manufacturer or supplier fails to comply with these requirements or comparable requirements in foreign countries, regulatory authorities may subject us to regulatory action, including criminal prosecutions, fines and suspension of the manufacture of our products.

Reports of Side Effects or Safety Concerns in Related Technology Fields or in Other Companies' Clinical Trials Could Delay or Prevent Us from Obtaining Regulatory Approval or Negatively Impact Public Perception of Our Product Candidates.

At present, there are a number of clinical trials being conducted by us and other pharmaceutical companies involving insulin delivery systems. If we discover that AFREZZA is associated with a significantly increased frequency of adverse events, or if other pharmaceutical companies announce that they observed frequent adverse events in their trials involving the pulmonary delivery of insulin, we could encounter delays in the timing of our clinical trials or difficulties in obtaining approval of AFREZZA. As well, the public perception of AFREZZA might be adversely affected, which could harm our business and results of operations and cause the market price of our common stock to decline, even if the concern relates to another company's products or product candidates.

There are also a number of clinical trials being conducted by other pharmaceutical companies involving compounds similar to, or competitive with, our other product candidates. Adverse results reported by these other companies in their clinical trials could delay or prevent us from obtaining regulatory approval or negatively impact public perception of our product candidates, which could harm our business and results of operations and cause the market price of our common stock to decline.

Risks Related to Intellectual Property

If We Are Unable to Protect Our Proprietary Rights, We May Not Be Able to Compete Effectively, or Operate Profitably.

Our commercial success depends, in large part, on our ability to obtain and maintain intellectual property protection for our technology. Our ability to do so will depend on, among other things, complex legal and factual questions, and it should be noted that the standards regarding intellectual property rights in our fields are still evolving. We attempt to protect our proprietary technology through a combination of patents, trade secrets and confidentiality agreements. We own a number of domestic and international patents, have a number of domestic and international patent applications pending and have licenses to additional patents. We

cannot assure you that our patents and licenses will successfully preclude others from using our technologies, and we could incur substantial costs in seeking enforcement of our proprietary rights against infringement. Even if issued, the patents may not give us an advantage over competitors with similar alternative technologies.

Moreover, the issuance of a patent is not conclusive as to its validity or enforceability and it is uncertain how much protection, if any, will be afforded by our patents. A third party may challenge the validity or enforceability of a patent after its issuance by various proceedings such as oppositions in foreign jurisdictions or re-examinations in the United States. If we attempt to enforce our patents, they may be challenged in court where they could be held invalid, unenforceable, or have their breadth narrowed to an extent that would destroy their value.

We also rely on unpatented technology, trade secrets, know-how and confidentiality agreements. We require our officers, employees, consultants and advisors to execute proprietary information and invention and assignment agreements upon commencement of their relationships with us. We also execute confidentiality agreements with outside collaborators. There can be no assurance, however, that these agreements will provide meaningful protection for our inventions, trade secrets, know-how or other proprietary information in the event of unauthorized use or disclosure of such information. If any trade secret, know-how or other technology not protected by a patent were to be disclosed to or independently developed by a competitor, our business, results of operations and financial condition could be adversely affected.

If We Become Involved in Lawsuits to Protect or Enforce Our Patents or the Patents of Our Collaborators or Licensors, We Would Be Required to Devote Substantial Time and Resources to Prosecute or Defend Such Proceedings.

Competitors may infringe our patents or the patents of our collaborators or licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover its technology. A court may also decide to award us a royalty from an infringing party instead of issuing an injunction against the infringing activity. An adverse determination of any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings brought by the U.S. Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications or those of our collaborators or licensors. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and be a distraction to our management. We may not be able, alone or with our collaborators and licensors, to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States. We may not prevail in any litigation or interference proceeding in which we are involved. Even if we do prevail, these proceedings can be very expensive and distract our management.

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

If Our Technologies Conflict with the Proprietary Rights of Others, We May Incur Substantial Costs as a Result of Litigation or Other Proceedings and We Could Face Substantial Monetary Damages and Be Precluded from Commercializing Our Products, which Would Materially Harm Our Business.

Over the past three decades the number of patents issued to biotechnology companies has expanded dramatically. As a result it is not always clear to industry participants, including us, which patents cover the multitude of biotechnology product types. Ultimately, the courts must determine the scope of coverage afforded by a patent and the courts do not always arrive at uniform conclusions.

A patent owner may claim that we are making, using, selling or offering for sale an invention covered by the owner's patents and may go to court to stop us from engaging in such activities. Such litigation is not uncommon in our industry.

Patent lawsuits can be expensive and would consume time and other resources. There is a risk that a court would decide that we are infringing a third party's patents and would order us to stop the activities covered by the patents, including the commercialization of our products. In addition, there is a risk that we would have to pay the other party damages for having violated the other party's patents (which damages may be increased, as well as attorneys' fees ordered paid, if infringement is found to be willful), or that we will be required to obtain a license from the other party in order to continue to commercialize the affected products, or to design our products in a manner that does not infringe a valid patent. We may not prevail in any legal action, and a required license under the patent may not be available on acceptable terms or at all, requiring cessation of activities that were found to infringe a valid patent. We also may not be able to develop a non-infringing product design on commercially reasonable terms, or at all.

Moreover, certain components of AFREZZA and/or our cancer vaccines may be manufactured outside the United States and imported into the United States. As such, third parties could file complaints under 19 U.S.C. Section 337(a)(1)(B), or a 337 action, with the International Trade Commission, or the ITC. A 337 action can be expensive and would consume time and other resources. There is a risk that the ITC would decide that we are infringing a third party's patents and either enjoin us from importing the infringing products or parts thereof into the United States or set a bond in an amount that the ITC considers would offset our competitive advantage from the continued importation during the statutory review period. The bond could be up to 100% of the value of the patented products. We may not prevail in any legal action, and a required license under the patent may not be available on acceptable terms, or at all, resulting in a permanent injunction preventing any further importation of the infringing products or parts thereof into the United States. We also may not be able to develop a non-infringing product design on commercially reasonable terms, or at all.

Although we own a number of domestic and foreign patents and patent applications relating to AFREZZA and cancer vaccine products under development, we have identified certain third-party patents having claims relating to pulmonary insulin delivery that may trigger an allegation of infringement upon the commercial manufacture and sale of AFREZZA as well as third-party patents disclosing methods of use and compositions of matter related to cancer vaccines that also may trigger an allegation of infringement upon the commercial manufacture and sale of our cancer immunotherapy. If a court were to determine that our insulin products or cancer therapies were infringing any of these patent rights, we would have to establish with the court that these patents were invalid or unenforceable in order to avoid legal liability for infringement of these patents. However, proving patent invalidity or unenforceability can be difficult because issued patents are presumed valid. Therefore, in the event that we are unable to prevail in an infringement or invalidity action we will have to either acquire the third-party patents outright or seek a royalty-bearing license. Royalty-bearing licenses effectively increase production costs and therefore may materially affect product profitability. Furthermore, should the patent holder refuse to either assign or license us the infringed patents, it may be necessary to cease manufacturing the product entirely and/or design around the patents, if possible. In either event, our business would be harmed and our profitability could be materially adversely impacted.

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

In addition, patent litigation may divert the attention of key personnel and we may not have sufficient resources to bring these actions to a successful conclusion. At the same time, some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. An adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling our products or result in substantial monetary damages, which would adversely affect our business and results of operations and cause the market price of our common stock to decline.

We May Not Obtain Trademark Registrations for Our Potential Trade Names.

We have not selected trade names for some of our product candidates; therefore, we have not filed trademark registrations for our potential trade names for our product candidates in all jurisdictions, nor can we assure that we will be granted registration of those potential trade names for which we have filed. Although we intend to defend any opposition to our trademark registrations, no assurance can be given that any of our trademarks will be registered in the United States or elsewhere or that the use of any of our trademarks will confer a competitive advantage in the marketplace. Furthermore, even if we are successful in our trademark registrations, the FDA has its own process for drug nomenclature and its own views concerning appropriate proprietary names. It also has the power, even after granting market approval, to request a company to reconsider the name for a product because of evidence of confusion in the marketplace. We cannot assure you that the FDA or any other regulatory authority will approve of any of our trademarks or will not request reconsideration of one of our trademarks at some time in the future.

Risks Related to Our Common Stock

Our Stock Price Is Volatile.

The stock market, particularly in recent years, has experienced significant volatility particularly with respect to pharmaceutical and biotechnology stocks, and this trend may continue. The volatility of pharmaceutical and biotechnology stocks often does not relate to the operating performance of the companies represented by the stock. Our business and the market price of our common stock may be influenced by a large variety of factors, including:

- the progress and results of our clinical trials;
- general economic, political or stock market conditions;
- legislative developments;
- announcements by us or our competitors concerning clinical trial results, acquisitions, strategic alliances, technological innovations, newly approved commercial products, product discontinuations, or other developments;
- the availability of critical materials used in developing and manufacturing AFREZZA or other product candidates;
- developments or disputes concerning our patents or proprietary rights;

- the expense and time associated with, and the extent of our ultimate success in, securing regulatory approvals;
- announcements by us concerning our financial condition or operating performance;
- changes in securities analysts' estimates of our financial condition or operating performance;
- general market conditions and fluctuations for emerging growth and pharmaceutical market sectors;
- the issuance and sale of our common stock in this offering and pursuant to the Seaside purchase agreement and the Mann purchase agreement over the terms of these agreements;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;
- the existence of, and the issuance of shares of our common stock pursuant to, the share lending agreement and the short sales of our common stock effected in connection with the sale of the notes in our concurrent note offering; and
- discussion of AFREZZA, our other product candidates, competitors' products, or our stock price by the financial and scientific press, the healthcare community and online investor communities such as chat rooms. In particular, statements about us and our investigational products that appear on interactive websites that permit users to generate content anonymously or under a pseudonym may be difficult to verify and statements attributed to company officials may, in fact, have originated elsewhere.

Any of these risks, as well as other factors, could cause the market price of our common stock to decline.

If Other Biotechnology and Biopharmaceutical Companies or the Securities Markets in General Encounter Problems, the Market Price of Our Common Stock Could Be Adversely Affected.

Public companies in general and companies included on the Nasdaq Global Market in particular have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. There has been particular volatility in the market prices of securities of biotechnology and other life sciences companies, and the market prices of these companies have often fluctuated because of problems or successes in a given market segment or because investor interest has shifted to other segments. These broad market and industry factors may cause the market price of our common stock to decline, regardless of our operating performance. We have no control over this volatility and can only focus our efforts on our own operations, and even these may be affected due to the state of the capital markets.

In the past, following periods of large price declines in the public market price of a company's securities, securities class action litigation has often been initiated against that company. Litigation of this type could result in substantial costs and diversion of management's attention and resources, which would hurt our business. Any adverse determination in litigation could also subject us to significant liabilities.

Our Chairman, Chief Executive Officer and Principal Stockholder Can Individually Control Our Direction and Policies, and His Interests May Be Adverse to the Interests of Our Other Stockholders. After His Death, His Stock Will Be Left to His Funding Foundations for Distribution to Various Charities, and We Cannot Assure You of the Manner in which Those Entities will Manage Their Holdings.

At July 23, 2010, Mr. Mann beneficially owned approximately 42.1% of our outstanding shares of capital stock. After giving effect to the issuance of 9,000,000 shares of our common stock in this offering, at July 23, 2010 Mr. Mann would have beneficially owned approximately 39.0% of our outstanding shares of capital stock. We believe members of Mr. Mann's family beneficially owned approximately an additional 1% of our outstanding shares of common stock, although Mr. Mann does not have voting or investment power with respect to these shares. By virtue of his holdings, Mr. Mann can and will continue to be able to effectively control the election of the members of our board of directors, our management and our affairs and prevent corporate transactions such as mergers, consolidations or the sale of all or substantially all of our assets that may be favorable from our standpoint or that of our other stockholders or cause a transaction that we or our other stockholders may view as unfavorable.

Subject to compliance with United States federal and state securities laws, and lockup restrictions in connection with the concurrent offering of our convertible notes, Mr. Mann is free to sell the shares of our stock he holds at any time. Upon his death, we have been advised by Mr. Mann that his shares of our capital stock will be left to the Alfred E. Mann Medical Research Organization, or AEMMRO, and AEM Foundation for Biomedical Engineering, or AEMFBE, not-for-profit medical research foundations that serve as funding organizations for Mr. Mann's various charities, including the Alfred Mann Foundation, or AMF, and the Alfred Mann Institutes at the University of Southern California, the Technion-Israel Institute of Technology, and Purdue University, and that may serve as funding organizations for any other charities that he may establish. The AEMMRO is a membership foundation consisting of six members, including Mr. Mann, his wife, three of his children and Dr. Joseph Schulman, the chief scientist of the AEMFBE. The AEMFBE is a membership foundation consisting of five members, including Mr. Mann, his wife, and the same three of his children. Although we understand that the members of AEMMRO and AEMFBE have been advised of Mr. Mann's objectives for these foundations, once Mr. Mann's shares of our capital stock become the property of the foundations, we cannot assure you as to how those shares will be distributed or how they will be voted.

The Future Sale of Our Common Stock or the Conversion of Our Senior Convertible Notes into Common Stock Could Negatively Affect Our Stock Price.

As of July 23, 2010, we had approximately 113,760,415 shares of common stock outstanding. Substantially all of these shares are available for public sale, subject in some cases to volume and other limitations or delivery of a prospectus. If our common stockholders sell substantial amounts of common stock in the public market, or the market perceives that such sales may occur, the market price of our common stock may decline. Likewise the issuance of additional shares of our common stock upon the conversion of some or all of our existing senior convertible notes or the convertible notes sold concurrently with this offering could adversely affect the trading price of our common stock. In addition, the existence of these notes may encourage short selling of our common stock by market participants. Furthermore, if we were to include in a company-initiated registration statement shares held by our stockholders pursuant to the exercise of their registration rights, the sale of those shares could impair our ability to raise needed capital by depressing the price at which we could sell our common stock.

On August 10, 2010, we entered into the Seaside purchase agreement and the Mann purchase agreement, which together provide for the sale and issuance by us of up to 36,400,000 shares of our common stock over a period of approximately 50 weeks. The future issuance of shares of our common stock pursuant to these two agreements, or the expectation that these issuances will occur, may further depress the price of our common stock.

In addition, we will need to raise substantial additional capital in the future to fund our operations. If we raise additional funds by issuing equity securities or additional convertible debt, the market price of our common stock may decline and our existing stockholders may experience significant dilution.

Anti-Takeover Provisions in Our Charter Documents and Under Delaware Law Could Make an Acquisition of Us, which May Be Beneficial to Our Stockholders, More Difficult and May Prevent Attempts by Our Stockholders to Replace or Remove Our Current Management.

We are incorporated in Delaware. Certain anti-takeover provisions under Delaware law and in our certificate of incorporation and amended and restated bylaws, as currently in effect, may make a change of control of our company more difficult, even if a change in control would be beneficial to our stockholders. Our anti-takeover provisions include provisions such as a prohibition on stockholder actions by written consent, the authority of our board of directors to issue preferred stock without stockholder approval, and supermajority voting requirements for specified actions. In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits stockholders owning 15% or more of our outstanding voting stock from merging or combining with us in certain circumstances. These provisions may delay or prevent an acquisition of us, even if the acquisition may be considered beneficial by some of our stockholders. In addition, they may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

Because We Do Not Expect to Pay Dividends in the Foreseeable Future, You Must Rely on Stock Appreciation for Any Return on Your Investment.

We have paid no cash dividends on any of our capital stock to date, and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future, and payment of cash dividends, if any, will also depend on our financial condition, results of operations, capital requirements and other factors and will be at the discretion of our board of directors. Furthermore, we may in the future become subject to contractual restrictions on, or prohibitions against, the payment of dividends. Accordingly, the success of your investment in our common stock will likely depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate or maintain its current price. You could lose the entire value of your investment in our common stock.

Upon Completion of This Offering and the Concurrent Public Offering of Convertible Notes, We Will Have Reserved for Future Issuance Substantially All of Our Authorized but Unissued Shares of Common Stock, which May Impair Our Ability to Conduct Future Financing and Other Transactions.

Our certificate of incorporation currently authorizes us to issue up to 200,000,000 shares of common stock and 10,000,000 shares of preferred stock. As of June 30, 2010, we had a total of 86,325,779 shares of common stock that were authorized but unissued, and we have currently reserved a significant number of these shares for future issuance pursuant to outstanding equity awards, our equity plans, our 3.75% senior convertible notes due 2013, and our common stock purchase agreements with Seaside 88 and The Mann Group. Following the completion of this offering and the concurrent offering of convertible notes described under the caption “Description of Share Lending Agreement and Concurrent Offering of Our Convertible Notes”, and assuming the initial purchasers in the concurrent offering of convertible notes exercise their overallotment option in full, we will have reserved for issuance substantially all of our authorized but unissued shares of common stock. As a result, our ability to issue shares of common stock other than pursuant to existing arrangements will be limited until such time, if ever, that we are able to amend our certificate of incorporation to further increase our authorized shares of common stock or shares currently reserved for issuance otherwise become available (for example, due to the termination of the underlying agreement to issue the shares).

If we are unable to enter into new arrangements to issue shares of our common stock or securities convertible or exercisable into shares of our common stock, our ability to complete equity-based financings or other transactions that involve the potential issuance of our common stock or securities convertible or exercisable into our common stock, will be limited. In lieu of issuing common stock or securities convertible into our common stock in any future equity financing transactions, we may need to issue some or all of our authorized but unissued shares of preferred stock, which would likely have superior rights, preferences and privileges to those of our common stock, or we may need to issue debt that is not convertible into shares of our common stock, which may require us to grant security interests in our assets and property and/or impose covenants upon us that restrict our business. If we are unable to issue additional shares of common stock or securities convertible or exercisable into our common stock, our ability to enter into strategic transactions such as acquisitions of companies or technologies, may also be limited. If we propose to amend our certificate of incorporation to increase our authorized shares of common stock, such a proposal would require the approval by the holders of a majority of our outstanding shares of common stock, and we cannot assure you that such a proposal would be adopted. If we are unable to complete financing, strategic or other transactions due to our inability to issue additional shares of common stock or securities convertible or exercisable into our common stock, our financial condition and business prospects may be materially harmed.

Risks Related to This Offering

The Effect of the Issuance and Sale of Our Shares of Common Stock in this Offering, which Issuance Is Being Made to Facilitate Transactions by which Investors in Our Convertible Notes May Hedge Their Investments, May Be to Lower the Market Price of Our Common Stock.

All of the shares sold in this offering are being borrowed by the share borrower under the share lending agreement. We will not receive any proceeds from the borrowed shares of common stock, but we will receive a nominal one-time lending fee from the share borrower for the use of those shares. All borrowed shares (or identical shares or, in certain circumstances, the cash value thereof) must be returned to us on or about the 45th business day following the date as of which the entire principal amount of the convertible notes ceases to be outstanding, subject to extension or acceleration under certain circumstances or early termination under BANA's option. See "Description of Share Lending Agreement and Concurrent Offering of Our Convertible Notes."

The existence of the share lending agreement, the short sales of our common stock effected in this offering and the trading of the notes following completion of this offering could cause the market price of our common stock to be lower over the term of the share lending agreement than it would have been had we not entered into that agreement, due to the effect of the increase in the number of outstanding shares of our common stock or otherwise. In addition, we have been informed by Merrill Lynch, Pierce, Fenner & Smith Incorporated that it or its affiliates intend to use the short position created by the share loan and the concurrent short sales of the borrowed shares in this offering for purposes reasonably designed to facilitate transactions by which investors in the notes may hedge their investments through short sales or privately negotiated derivative transactions. The market price of our common stock could be negatively affected by these or other short sales of our common stock, including other sales by the purchasers of the notes hedging their investment therein.

Future Sales of Our Common Stock in the Public Market or the Issuance of Other Equity Securities May Adversely Affect the Market Price of Our Common Stock and Our Ability to Raise Funds in New Equity or Equity-Related Offerings.

Sales of a substantial number of shares of our common stock or other equity-related securities in the public market could depress the market price of our common stock, and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock or other equity-related securities would have on the market price of our common stock. In addition, the price of our common stock could be affected by possible sales of our common stock by purchasers of our convertible notes and by hedging or arbitrage trading activity that we expect to develop involving our common

stock. This hedging or arbitrage could, in turn, affect the market price of our common stock. In addition, the existence of the convertible notes also may encourage short selling by market participants because the conversion of such notes could depress our common stock price.

On August 10, 2010, we entered into the Seaside purchase agreement and the Mann purchase agreement, which together provide for the sale and issuance by us of up to 36,400,000 shares of our common stock over a period of approximately 50 weeks. The future issuance of shares of our common stock pursuant to these two agreements, or the expectation that these issuances will occur, may further depress the price of our common stock.

The Adjustments by Convertible Note Investors of Their Hedging Positions in Our Common Stock and the Expectation Thereof May Have a Negative Effect on the Market Price of Our Common Stock.

The short positions in our common stock resulting from the share loan and the sale of borrowed shares in this offering are expected to be used by the underwriter or its affiliates to facilitate hedging by investors in the convertible notes with respect to our common stock through privately negotiated derivative transactions. The borrowed shares sold in this offering may be more or less than the number of shares that will be needed from time to time by the convertible notes investors to hedge their exposure under the notes. Any buying or selling of shares of our common stock by the investors in the concurrent note offering to adjust their hedging positions may affect the market price of our common stock.

Changes in the Accounting Guidelines Relating to the Borrowed Shares Could Decrease Our Reported Net Loss or Earnings Per Share and Potentially Affect Our Common Stock Price.

Because the borrowed shares sold in this offering (or identical shares or, in certain circumstances, the cash value thereof) must be returned to us on or about the 45th business day following the date as of which the entire principal amount of the convertible notes offered concurrently ceases to be outstanding under the share lending agreement, subject to extension or acceleration under certain circumstances, we believe that under generally accepted accounting principles in the U.S., or U.S. GAAP, as presently in effect, the borrowed shares will not be considered outstanding for the purpose of computing and reporting our earnings or loss per share. If accounting guidelines were to change in the future, we may become required to treat the borrowed shares as outstanding for purposes of computing earnings or loss per share, and our reported earnings or loss per share would be reduced, which could affect our common stock price.

USE OF PROCEEDS

The shares of our common stock offered hereby are shares that we are loaning to the share borrower pursuant to the share lending agreement. We have been informed by Merrill Lynch, Pierce, Fenner & Smith Incorporated that it or its affiliates intend to use the short position created by the share loan and the short sales of the borrowed shares in this offering for purposes reasonably designed to facilitate transactions by which investors in our convertible note offering may hedge their investments through short sales or privately negotiated derivative transactions. We will not receive any proceeds from the sale of the borrowed shares in this offering, but we will receive a nominal one-time lending fee of $0.01 per share from the share borrower for the use of the shares. The share borrower or its affiliates will receive all the proceeds from the sale of the borrowed shares. See “Description of Share Lending Agreement and Concurrent Offering of Our Convertible Notes.”

CAPITALIZATION

The following table shows our cash and cash equivalents and capitalization as of June 30, 2010:

- on an actual basis; and
- on an as-adjusted basis to give effect to (1) our issuance and sale of $100,000,000 aggregate principal amount of notes in our concurrent convertible note offering, after deducting the discount to the initial purchasers and estimated offering expenses payable by us, and (2) the completion of this offering of 9,000,000 borrowed shares including our receipt of the nominal one-time lending fee in respect of the borrowed shares.

This table should be read with "Use of Proceeds" and our financial statements and the related notes incorporated by reference in this prospectus supplement.

	Actual	As Adjusted
	(in thousands, except for share and per share data)	
Cash and cash equivalents	$30,772	$126,612
Note payable to principal stockholder(1)	242,000	242,000
Senior convertible notes due 2013	113,030	113,030
Senior convertible notes due 2015 offered concurrently	—	100,000
Stockholders' equity:		
Undesignated preferred stock, $0.01 par value, 10,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value; 200,000,000 shares authorized; 113,674,221 shares issued and outstanding, actual, and 122,674,221 shares issued and outstanding, as adjusted(2)	1,137	1,227
Additional paid-in capital	1,552,335	1,552,544
Deficit accumulated during the development stage	(1,691,133)	(1,691,133)
Total stockholders' equity.	(137,662)	(137,363)
Total capitalization	$217,369	$317,668

(1) On August 10, 2010, we amended and restated the promissory note evidencing the loan arrangement with The Mann Group to extend the maturity date to December 31, 2012, to provide for the cancellation of indebtedness under the note in connection with the purchase of newly-issued shares of our common stock by The Mann Group pursuant to the Mann purchase agreement, to shorten the notice period from 180 days to 90 days (or the number of days to maturity of the note if less than 90 days) if The Mann Group requires us to prepay the note, and to eliminate our ability to reborrow under the note the amount of any cancelled indebtedness.

(2) The borrowed shares (or identical shares or, in certain circumstances, the cash value thereof) must be returned to us on or about the 45th business day following the date on which the entire principal amount of the convertible notes offered concurrently ceases to be outstanding, subject to extension or acceleration in certain circumstances. We believe that under U.S. GAAP, as presently in effect, the borrowed shares will not be considered outstanding for the purpose of computing and reporting our earnings or loss per share, although the borrowed shares will be outstanding for corporate law purposes.

Note the discussion above assumes that the initial purchasers' overallotment option for $10 million aggregate principal amount of additional notes will not be exercised.

The number of shares of common stock is based on the actual number of shares outstanding as of June 30, 2010, but excludes, as of that date:

- 6,210,883 shares of common stock issuable upon the exercise of outstanding stock options with a weighted average exercise price of $7.23 per share;
- 3,046,559 shares of common stock issuable upon the settlement of outstanding restricted stock units;
- 5,117,523 shares of common stock issuable upon the conversion of our outstanding 3.75% senior convertible notes due 2013 at a conversion price of approximately $22.47 per share and up to 1,484,064 shares issuable as make-whole premiums if the notes are converted in connection with certain fundamental charges;
- 2,882,873 shares of common stock reserved for issuance upon the exercise of outstanding warrants with a weighted average exercise price of $12.23 per share; and
- 8,295,091 shares of common stock available for future grant under our 2004 equity incentive plan, 2004 non-employee directors' stock option plan and 2004 employee stock purchase plan.

The warrants to purchase up to 2,882,873 shares of common stock set forth above subsequently expired in August 2010.

The number of shares of common stock also does not give effect to (a) the aggregate of up to 36,400,000 shares of common stock that may be issued pursuant to the Seaside purchase agreement and the Mann purchase agreement, provided that certain conditions under such agreements are met or (b) the shares of common stock reserved for issuance upon conversion of the convertible notes being concurrently offered by us.

PRICE RANGE OF COMMON STOCK

Our common stock has been traded on the Nasdaq Global Market under the symbol “MNKD” since July 28, 2004. The following table sets forth for the quarterly periods indicated, the high and low sales prices for our common stock as reported by the Nasdaq Global Market.

	High	Low
Year ended December 31, 2008		
First quarter	$8.62	$4.25
Second quarter	$6.44	$1.86
Third quarter	$5.25	$2.39
Fourth quarter	$4.30	$2.61
Year ended December 31, 2009		
First quarter	$4.09	$2.00
Second quarter	$9.25	$3.35
Third quarter	$12.30	$6.62
Fourth quarter	$9.94	$5.02
Year ended December 31, 2010		
First quarter	$11.12	$6.35
Second quarter	$7.33	$4.76
Third quarter (through August 18, 2010)	$7.36	$5.67

The closing sale price of our common stock on the Nasdaq Global Market was $5.97 on August 18, 2010. As of June 30, 2010, there were 190 registered holders of our common stock of record.

DIVIDEND POLICY

We have never declared or paid cash dividends. We do not anticipate declaring or paying cash dividends in the foreseeable future. Instead, we will retain our earnings, if any, for the future operation and expansion of our business.

DESCRIPTION OF SHARE LENDING AGREEMENT AND CONCURRENT OFFERING OF OUR CONVERTIBLE NOTES

Concurrently with this offering of borrowed shares of our common stock, we are offering $100 million aggregate principal amount of our 5.75% Senior Convertible Notes due 2015 (or $110 million if the initial purchasers in the note offering exercise their overallotment option in full) by means of a separate offering memorandum only to "qualified institutional buyers" (as defined in Rule 144A under the Securities Act) in reliance on the exemption from the registration requirements of the Securities Act provided by Rule 144A. We intend to use the net proceeds from the concurrent note offering to fund the costs of our clinical trials programs and other research and development activities, to expand our manufacturing operations, both on-going and planned, and for general corporate purposes, including working capital. This prospectus supplement is not an offer to sell nor a solicitation of an offer to buy our convertible notes, which offer is strictly limited to qualified institutional buyers that received a related offering memorandum from us or the initial purchasers of the notes.

To make the purchase of the convertible notes offered pursuant to the separate offering memorandum more attractive to prospective investors, we have entered into a share lending agreement concurrently with the pricing of the notes with Bank of America, N.A., or BANA, an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated, the underwriter in this common stock offering, as principal, under which we have agreed to lend to BANA 9,000,000 shares of our common stock (the "borrowed shares") during a period beginning on the date we enter into the share lending agreement and ending on or about the 45th business day following the date as of which the entire principal amount of the convertible notes ceases to be outstanding as the result of conversion, redemption, repurchase or cancellation, at maturity or otherwise, subject to extension or acceleration under certain circumstances or early termination at BANA's option. We will receive a nominal one-time lending fee of $0.01 for each share of our common stock that we loan to BANA.

BANA or its affiliate will receive all of the proceeds from this common stock offering. We will not receive any proceeds from this offering of common stock, other than the nominal one-time lending fee described above. The delivery of the shares of common stock hereunder is contingent upon the closing of the concurrent note offering, and the closing of our concurrent note offering is contingent upon the delivery by us of the borrowed shares pursuant to the share lending agreement.

We expect that delivery of our common stock in this offering will be made on or about the closing date of the concurrent note offering. The exact number of shares of our common stock sold in this offering will depend on the terms of the notes and the hedging to be conducted by certain investors in the notes, as described below.

Under the share lending agreement, BANA has agreed to use the shares borrowed from us and offered in this common stock offering for the purpose of directly or indirectly facilitating the sale of the notes and the hedging of the notes by certain holders as described below or performing its obligations under the share lending agreement.

The share loan under the share lending agreement will terminate and the borrowed shares (or identical shares or, in certain circumstances, the cash value thereof) must be returned to us on or about the 45th business day following the date on which the entire principal amount of the convertible notes ceases to be outstanding, subject to extension under certain circumstances, as well as under the following circumstances:

- BANA may terminate all or any portion of the loan at any time;
- we or BANA may terminate all or any portion of the loan upon a default by the other party under the share lending agreement, including certain breaches by BANA of its representations, warranties, covenants or agreements under the share lending agreement, or the bankruptcy of BANA or us; or

- the loan will terminate automatically if our common stock is exchanged for or converted into cash pursuant to a reorganization, merger, sale of substantially all of our assets, share exchange or similar transaction.

Any shares that we loan to BANA will be issued and outstanding for corporate law purposes, and accordingly, the holders of the borrowed shares will have all of the rights of a holder of our outstanding shares, including the right to vote the shares on all matters submitted to a vote of our stockholders and the right to receive any dividends or other distributions that we may pay or make on our outstanding shares of our common stock. However, under the share lending agreement, BANA has agreed:

- to pay to us an amount equal to any cash dividends that we pay on the borrowed shares; and
- that any other distribution that we make on the borrowed shares will be treated as part of the loan, or BANA may pay to us the cash value thereof, as determined by BANA.

To the extent the borrowed shares we lend under the share lending agreement and offered in this common stock offering have not been sold or returned to us, BANA has agreed that it and its affiliates will not vote any such borrowed shares of which it or its affiliate is the record or beneficial owner that are held by BANA or its affiliate prior to any sale thereof pursuant to a registration statement or for the purpose of hedging the share lending agreement and facilitating hedging by the convertible note investors. BANA has also agreed under the share lending agreement that it will not transfer or dispose of any borrowed shares, other than to its affiliates, unless the transfer or disposition is pursuant to a registration statement that is effective under the Securities Act. However, investors that purchase the shares from BANA (and any subsequent transferees of such purchasers), including purchasers in this offering, will be entitled to the same voting rights with respect to those shares as any other holder of our common stock.

In view of the contractual undertakings of BANA in the share lending agreement, which have the effect of substantially eliminating the economic dilution that otherwise would result from the issuance of the borrowed shares, we believe that under U.S. GAAP currently in effect, the borrowed shares will not be considered outstanding for the purpose of computing and reporting our earnings or loss per share.

We have been advised by BANA that it, or its affiliates, intend to use shares borrowed from us to facilitate the sale of the notes and hedging by certain holders of their exposure under the notes, through short sales by BANA or its affiliate of the borrowed shares effected in this offering and the entry into privately negotiated derivative transactions with such investors. In addition, BANA and its affiliates may engage in or terminate these transactions at any time and from time to time during the term of the share lending agreement in share amounts to be determined by BANA and its affiliates.

The existence of the share lending agreement and the short sales of our common stock effected in this offering could have the effect of causing the market price of our common stock to be lower over the term of the share lending agreement than it would have been had we not entered into the agreement. See “Risk Factors—Risks Related to this Offering—The effect of the issuance of our shares of common stock in this offering, which issuance is being made to facilitate transactions by which investors in our convertible notes may hedge their investments, may be to lower the market price of our common stock.” Despite the potential negative impact on the price of our common stock, we entered into the share lending agreement as a means to facilitate the offer and sale of the convertible notes pursuant to the separate offering memorandum.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 200,000,000 shares of common stock, $0.01 par value, and 10,000,000 shares of preferred stock, $0.01 par value. As of June 30, 2010, there were 113,674,221 shares of common stock outstanding and no shares of preferred stock outstanding.

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of our stockholders, including the election of our directors. Under our certificate of incorporation and bylaws, our stockholders will not have cumulative voting rights. Accordingly, the holders of a majority of our outstanding shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends

Subject to preferences that may be applicable to any outstanding shares of our preferred stock, holders of our common stock are entitled to receive ratably any dividends our board of directors declares out of funds legally available for that purpose.

Liquidation, Dissolution or Winding Up

If we liquidate, dissolve or wind up, the holders of our common stock are entitled to share ratably in all assets legally available for distribution to our stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any outstanding shares of our preferred stock.

Rights and Preferences

Our common stock has no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any outstanding shares of our of preferred stock, which we may designate and issue in the future.

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

Delaware takeover statute

We are subject to Section 203 of the Delaware General Corporation Law, or DGCL, which regulates acquisitions of some Delaware corporations. In general, Section 203 prohibits, with some exceptions, a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the date of the transaction in which the person became an interested stockholder, unless:

- the board of directors of the corporation approved the business combination or the other transaction in which the person became an interested stockholder prior to the date of the business combination or other transaction;
- upon consummation of the transaction that resulted in the person becoming an interested stockholder, the person owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and

also officers of the corporation and shares issued under employee stock plans under which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or subsequent to the date the person became an interested stockholder, the board of directors of the corporation approved the business combination and the stockholders of the corporation authorized the business combination at an annual or special meeting of stockholders by the affirmative vote of at least $66^{2}/_{3}$% of the outstanding stock of the corporation not owned by the interested stockholder.

Section 203 of the DGCL generally defines a "business combination" to include any of the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the corporation's assets or outstanding stock involving the interested stockholder;
- in general, any transaction that results in the issuance or transfer by the corporation of any of its stock to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of its stock owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an "interested stockholder" as any person who, together with the person's affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock.

Section 203 of the DGCL could depress our stock price and delay, discourage or prohibit transactions not approved in advance by our board of directors, such as takeover attempts that might otherwise involve the payment to our stockholders of a premium over the market price of our common stock.

Certificate of incorporation and bylaw provisions

Our certificate of incorporation and bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in our control or our management, including, but not limited to the following:

- Our board of directors can issue up to 10,000,000 shares of preferred stock with any rights or preferences, including the right to approve or not approve an acquisition or other change in our control.
- Our certificate of incorporation and bylaws provide that all stockholder actions must be effected at a duly called meeting of holders and not by written consent.
- Our bylaws provide that special meetings of the stockholders may be called only by the Chairman of our board of directors, by our Chief Executive Officer, by our board of directors upon a resolution adopted by a majority of the total number of authorized directors or, under certain limited circumstances, by the holders of at least 5% of our outstanding voting stock.

- Our bylaws provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide timely notice in writing and also specify requirements as to the form and content of a stockholder's notice. These provisions may delay or preclude stockholders from bringing matters before a meeting of our stockholders or from making nominations for directors at a meeting of stockholders, which could delay or deter takeover attempts or changes in our management.
- Our certificate of incorporation provides that, subject to the rights of the holders of any outstanding series of preferred stock, all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum. In addition, our certificate of incorporation provides that our board of directors may fix the number of directors by resolution.
- Our certificate of incorporation does not provide for cumulative voting for directors. The absence of cumulative voting may make it more difficult for stockholders who own an aggregate of less than a majority of our voting stock to elect any directors to our board of directors.

These and other provisions contained in our certificate of incorporation and bylaws are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. However, these provisions could delay or discourage transactions involving an actual or potential change in control of us or our management, including transactions in which our stockholders might otherwise receive a premium for their shares over market price of our stock and may limit the ability of stockholders to remove our current management or approve transactions that our stockholders may deem to be in their best interests and, therefore, could adversely affect the price of our common stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is BNY Mellon Shareowner Services, LLC. Its address is 400 South Hope Street, Suite 400, Los Angeles, California 90071.

UNDERWRITING

The shares of our common stock offered by this prospectus supplement are shares that we have agreed to loan to BANA, an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated ("Merrill Lynch"), pursuant to the share lending agreement.

We have been advised by BANA that it intends to use the shares borrowed from us to facilitate the sale of the convertible notes offered concurrently with this offering and hedging by certain holders of their exposure under the notes through entry into privately negotiated derivative transactions with such investors. The reference price of such derivative transactions will be negotiated between BANA or its affiliates and the investors in the notes, and may differ from the prices at which shares of common stock are sold in this offering. In connection with facilitating such transactions, BANA or its affiliates expect to receive customary negotiated fees from investors in convertible notes, which may be deemed to be underwriter's compensation. BANA and its affiliates may engage in such transactions at any time and from time to time during the term of the agreement in share amounts to be determined by BANA and such affiliates. We will not receive any proceeds from the sale of shares of our common stock pursuant to this prospectus supplement. The delivery of the shares being offered hereby is contingent upon the closing of the offering of convertible notes, and the closing of the offering of convertible notes is contingent upon the delivery by us of shares pursuant to the share lending agreement.

The borrowed shares are to be offered by Merrill Lynch at a price of $5.55 per share in a fixed price offering.

Under the share lending agreement, we will receive a nominal one-time lending fee of $0.01 per share from BANA. All expenses in connection with this offering are being paid in connection with the concurrent note offering.

We have entered into an underwriting agreement with Merrill Lynch, as underwriter, pursuant to which Merrill Lynch intends to sell the shares that BANA will be entitled to borrow from us pursuant to the share lending agreement.

We have agreed to indemnify BANA and Merrill Lynch against liabilities under the Securities Act, or contribute to payments which they may be required to make in that respect.

Merrill Lynch is acting as a book-running manager of the concurrent note offering in respect of which it expects to earn customary discounts. Merrill Lynch and its affiliates may perform various financial advisory, investment banking and commercial banking services from time to time for us and our affiliates.

LEGAL MATTERS

Certain legal matters relating to the sale of our common stock being offered hereby will be passed upon for us by Cooley LLP, San Diego, California. The underwriter is being represented by Davis Polk & Wardwell LLP, New York, New York and Menlo Park, California.

EXPERTS

The financial statements incorporated in this prospectus supplement by reference from our Annual Report on Form 10-K and the effectiveness of our internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of common stock we are offering under this prospectus supplement. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. We also file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement, as well as any other material we file with the SEC, at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information on the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including MannKind. The SEC's Internet site can be found at http://www.sec.gov.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus supplement the information we file with it, which means that we can disclose important information to you by referring you to those documents. Information incorporated by reference is part of this prospectus supplement. Later information filed with the SEC will update and supersede this information.

We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until this offering is completed (other than current reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our annual report on Form 10-K for the fiscal year ended December 31, 2009, which was filed on March 16, 2010;
- our quarterly reports on Form 10-Q for the quarters ended March 31, 2010 and June 30, 2010, which were filed on April 30, 2010 and August 2, 2010, respectively;
- our current reports on Form 8-K filed on March 1, 2010, June 15, 2010, August 11, 2010 (Items 1.01, 3.02, 8.01 and 9.01) and August 11, 2010 (Items 8.01 and 9.01);
- our Definitive Proxy Statement on Schedule 14A (other than the portions thereof which are furnished and not filed), which was filed on April 30, 2010; and

- the description of our common stock set forth in our registration statement on Form 8-A, filed with the SEC on July 23, 2004, including any amendments or reports filed for the purposes of updating this description.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

Investor Relations
MannKind Corporation
28903 North Avenue Paine
Valencia, CA 91355
(661) 775-5300

In accordance with Rule 412 of the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

PROSPECTUS

$200,000,000

MannKind Corporation

Common Stock
Warrants
Debt Securities

From time to time, we may sell up to an aggregate of $200,000,000 of our common stock, warrants or debt securities. We will specify in any accompanying prospectus supplement the terms of any offering.

Our common stock is traded on The NASDAQ Global Market under the trading symbol “MNKD.” The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on The NASDAQ Global Market or other securities exchange of the securities covered by the prospectus supplement.

Our principal executive offices are located at 28903 North Avenue Paine, Valencia, California 91355, and our telephone number at that address is (661) 775-5300.

You should read this prospectus and any prospectus supplement carefully before you invest.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading “Risk Factors” on page 2 of this prospectus as well as those contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution” in this prospectus and in the applicable prospectus supplement. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

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 May 11, 2010.

TABLE OF CONTENTS

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration process. Under this shelf registration process, we may sell common stock, warrants or debt securities in one or more offerings up to a total dollar amount of $200,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of those securities. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these

offerings. We may also add, update or change in the prospectus supplement (and in any related free writing prospectus that we may authorize to be provided to you) any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference” before buying any of the securities being offered.

SUMMARY

The following summary provides an overview of selected information relating to this offering and does not contain all the information that you should consider before investing in our securities. You should carefully read this prospectus, all documents incorporated by reference, any prospectus supplement and related free writing prospectus, and the additional information described under the caption "WHERE YOU CAN FIND MORE INFORMATION," beginning on page 18, before buying securities in this offering. References in this prospectus to "MannKind," the "Company," "we," "us" and "our" refer to MannKind Corporation and its subsidiary, on a consolidated basis, unless the context requires otherwise.

MannKind Corporation

MannKind Corporation is a biopharmaceutical company focused on the discovery, development and commercialization of therapeutic products for diseases such as diabetes and cancer. Our lead product candidate, AFREZZA (insulin human [rDNA origin]) Inhalation Powder, is an ultra rapid-acting insulin that has completed Phase 3 clinical trials that evaluated its safety and efficacy in the treatment of diabetes. We submitted a new drug application, or NDA, to the United Stated Food and Drug Administration, or FDA, for AFREZZA in March 2009. On March 12, 2010, we received a Complete Response letter from the FDA regarding this NDA, seeking additional information about AFREZZA. Currently, AFREZZA remains under review by the FDA.

AFREZZA utilizes our proprietary Technosphere formulation technology, which is based on a class of organic molecules that are designed to self-assemble into small particles onto which drug molecules can be loaded. With AFREZZA, we load recombinant human insulin onto the Technosphere particles; however, this technology is not limited to insulin delivery. We believe it represents a versatile drug delivery platform that may allow pulmonary administration of certain drugs that currently require administration by injection, such as glucagon-like peptide-1, or GLP-1. Beyond convenience, we believe the key advantage of drugs inhaled as Technosphere formulations is that they have been shown to be absorbed very rapidly into the arterial circulation, essentially mimicking intra-arterial administration.

In addition to our Technosphere platform, we are developing therapies for the treatment of different types of cancer. We have conducted Phase 1 clinical studies of two immunotherapy product candidates, MKC1106-PP and MKC1106-MT, and are preparing to initiate a Phase 2 study of MKC1106-MT in patients with advanced melanoma. We are also conducting preclinical studies of a drug candidate, MKC204, that may have the potential to treat certain malignancies and inflammatory diseases.

We are a development stage enterprise and have incurred significant losses since our inception in 1991. As of March 31, 2010, we have incurred a cumulative net loss of $1.6 billion and accumulated deficit in stockholders' equity of $100.9 million. To date, we have not generated any product revenues and have funded our operations primarily through the sale of equity securities and convertible debt securities. If we are unable to obtain additional funding in the future, there will be substantial doubt about our ability to continue as a going concern.

We have held extensive discussions with a number of pharmaceutical companies concerning a potential strategic business collaboration for AFREZZA. Recently, we initiated partnership discussions with a number of pharmaceutical companies regarding our cancer immunotherapy and cancer drug programs. We cannot predict when, if ever, we could conclude an agreement with a partner. There can be no assurance that any such collaboration will be available to us on a timely basis or on acceptable terms, if at all.

We do not expect to record sales of any product prior to regulatory approval and commercialization of AFREZZA. We currently do not have the required approvals to market any of our product candidates, and we may not receive such approvals. We may not be profitable even if we succeed in commercializing any of

our product candidates. We expect to make substantial expenditures and to incur additional operating losses for at least the next several years as we:

- continue the clinical development of AFREZZA and new inhalation systems for the treatment of diabetes;
- seek regulatory approval to sell AFREZZA in the United States and other markets;
- seek sales and marketing collaborations for AFREZZA;
- seek development collaborations for our cancer immunotherapy and cancer drug programs; and
- develop additional applications of our proprietary Technosphere platform technology for the pulmonary delivery of other drugs.

Our business is subject to significant risks, including but not limited to the risks inherent in our ongoing clinical trials and the regulatory approval process, the results of our research and development efforts, competition from other products and technologies and uncertainties associated with obtaining and enforcing patent rights.

Risk Factors

An investment in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the specific risk factors discussed in the sections entitled “Risk Factors” contained in any applicable prospectus supplement and our filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, any applicable prospectus supplement or free writing prospectus, or incorporated by reference in this prospectus. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of your investment.

The Securities We May Offer

We may offer shares of our common stock, various series of debt securities and/or warrants to purchase any of these securities, with a total value of up to $200,000,000, from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- original issue discount, if any;
- rates and times of payment of interest, dividends or other payments, if any;

- redemption, conversion, exercise, exchange or sinking fund terms, if any;
- ranking;
- restrictive covenants, if any;
- voting or other rights, if any;
- conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange; and
- certain federal income tax considerations.

A prospectus supplement and any related free writing prospectus that we may authorize to be provided to you also may add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of its effectiveness.

This prospectus may not be used to offer or sell securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to or through agents, underwriters or dealers. We, and our agents, dealers or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

- the name of those agents or underwriters;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote per share on all matters submitted to a vote of stockholders. Subject to any preferences of any of our preferred stock that may be outstanding, holders of our common stock are entitled to dividends when and if declared by our board of directors.

Warrants. We may issue warrants for the purchase of common stock or debt securities in one or more series, from time to time. We may issue warrants independently or together with common stock or debt securities, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. Forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental warrant agreements and forms of warrant certificates will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

We will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

Debt Securities. We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into or exchangeable for our common stock or other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

The debt securities will be issued under one or more documents called indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. Forms of indentures have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated:

	Fiscal Year Ended December 31,					Three Months Ended March 31,
	2005	2006	2007	2008	2009	2010
Ratio of earnings to fixed charges	—	—	—	—	—	—

For the purpose of this table, “earnings” consist of income (loss) from continuing operations before income taxes, extraordinary items, cumulative effect of accounting changes, equity in net losses of affiliates and fixed charges. “Fixed charges” consist of interest expense. For the fiscal years ended December 31, 2005, 2006, 2007, 2008 and 2009, and the three months ended March 31, 2010, we had no earnings. Our earnings for those periods were insufficient to cover fixed charges by $114.3 million, $230.5 million, $293.2 million, $303.0 million, $220.1 million, and $44.7 million, respectively.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements contained in this prospectus, in the documents incorporated by reference herein and in any prospectus supplement that are not strictly historical in nature are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements are subject to the "safe harbor" created by Section 27A of the Securities Act and Section 21E of the Exchange Act and may include, but are not limited to, statements about:

- the progress, timing and results of clinical trials and research and development efforts involving our product candidates;
- the submission of applications for and receipt of regulatory clearances and approvals;
- our ability to successfully protect our intellectual property;
- our plans to conduct future clinical trials or research and development efforts;
- our expectations about partnering, marketing and commercializing our product candidates; and
- economic conditions, both generally and those specifically related to the biotechnology industry.

In some cases, you can identify forward-looking statements by terms such as "anticipates," "believes," "could," "estimates," "expects," "goal," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," the negative of these words and words or similar expressions intended to identify forward-looking statements. These statements reflect our views as of the date on which they were made with respect to future events and are based on assumptions and subject to risks and uncertainties. The underlying information and expectations are likely to change over time. Given these uncertainties, you should not place undue reliance on these forward-looking statements as actual events or results may differ materially from those projected in the forward-looking statements due to various factors, including, but not limited to, those set forth under the heading "Risk Factors" in any applicable prospectus supplement or free writing prospectus and in our SEC filings. These forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

You should rely only on the information contained, or incorporated by reference, in this prospectus, the registration statement of which this prospectus is a part, the documents incorporated by reference herein, and any applicable prospectus supplement or free writing prospectus and understand that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors discussed here or incorporated by reference, in addition to the other information set forth in this prospectus, any accompanying prospectus supplement or free writing prospectus and in the documents incorporated by reference.

USE OF PROCEEDS

Except as described in any prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds from this offering for general corporate purposes, including clinical trial expenses, research and development expenses, general and administrative expenses, repayment of outstanding indebtedness, manufacturing expenses, and other expenses related to commercialization of AFREZZA. We may also use a portion of the net proceeds to in-license, invest in or acquire businesses or technologies that we believe are complementary to our own, although we have no current plans, commitments or agreements with respect to any acquisitions. As of the date of this prospectus, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, we will retain broad discretion over the use of such proceeds. Pending the use of the net proceeds from this offering as described above, we intend to invest the net proceeds in investment-grade, interest-bearing securities.

DESCRIPTION OF COMMON STOCK

Our authorized capital stock consists of 150,000,000 shares of common stock, $0.01 par value, and 10,000,000 shares of preferred stock, $0.01 par value. At our annual meeting of stockholders scheduled for June 10, 2010, we are seeking approval of an amendment to our certificate of incorporation to increase the authorized number of shares of common stock from 150,000,000 shares to 200,000,000 shares. As of April 21, 2010, there were 113,454,807 shares of common stock outstanding and no shares of preferred stock outstanding.

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of our stockholders, including the election of our directors. Under our certificate of incorporation and bylaws, our stockholders will not have cumulative voting rights. Accordingly, the holders of a majority of our outstanding shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. In all other matters, an action by our common stockholders requires the affirmative vote of the holders of a majority of our outstanding shares of common stock entitled to vote.

Dividends

Subject to preferences that may be applicable to any outstanding shares of our preferred stock, holders of our common stock are entitled to receive ratably any dividends our board of directors declares out of funds legally available for that purpose. Any dividends on our common stock will be non-cumulative.

Liquidation, Dissolution or Winding Up

If we liquidate, dissolve or wind up, the holders of our common stock are entitled to share ratably in all assets legally available for distribution to our stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any outstanding shares of our preferred stock.

Rights and Preferences

Our common stock has no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any outstanding shares of our of preferred stock, which we may designate and issue in the future.

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

Delaware takeover statute

We are subject to Section 203 of the Delaware General Corporation Law, or DGCL, which regulates acquisitions of some Delaware corporations. In general, Section 203 prohibits, with some exceptions, a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the date of the transaction in which the person became an interested stockholder, unless:

- the board of directors of the corporation approved the business combination or the other transaction in which the person became an interested stockholder prior to the date of the business combination or other transaction;

- upon consummation of the transaction that resulted in the person becoming an interested stockholder, the person owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and also officers of the corporation and shares issued under employee stock plans under which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date the person became an interested stockholder, the board of directors of the corporation approved the business combination and the stockholders of the corporation authorized the business combination at an annual or special meeting of stockholders by the affirmative vote of at least $66^{2}/_{3}$% of the outstanding stock of the corporation not owned by the interested stockholder.

Section 203 of the DGCL generally defines a "business combination" to include any of the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the corporation's assets or outstanding stock involving the interested stockholder;
- in general, any transaction that results in the issuance or transfer by the corporation of any of its stock to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of its stock owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an "interested stockholder" as any person who, together with the person's affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock.

Section 203 of the DGCL could depress our stock price and delay, discourage or prohibit transactions not approved in advance by our board of directors, such as takeover attempts that might otherwise involve the payment to our stockholders of a premium over the market price of our common stock.

Certificate of incorporation and bylaw provisions

Our certificate of incorporation and bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in our control or our management, including, but not limited to the following:

- Our board of directors can issue up to 10,000,000 shares of preferred stock with any rights or preferences, including the right to approve or not approve an acquisition or other change in our control.
- Our certificate of incorporation and bylaws provide that all stockholder actions must be effected at a duly called meeting of holders and not by written consent.
- Our bylaws provide that special meetings of the stockholders may be called only by the Chairman of our board of directors, by our Chief Executive Officer, by our board of directors

upon a resolution adopted by a majority of the total number of authorized directors or, under certain limited circumstances, by the holders of at least 5% of our outstanding voting stock.

- Our bylaws provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide timely notice in writing and also specify requirements as to the form and content of a stockholder's notice. These provisions may delay or preclude stockholders from bringing matters before a meeting of our stockholders or from making nominations for directors at a meeting of stockholders, which could delay or deter takeover attempts or changes in our management.
- Our certificate of incorporation provides that, subject to the rights of the holders of any outstanding series of preferred stock, all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum. In addition, our certificate of incorporation provides that our board of directors may fix the number of directors by resolution.
- Our certificate of incorporation does not provide for cumulative voting for directors. The absence of cumulative voting may make it more difficult for stockholders who own an aggregate of less than a majority of our voting stock to elect any directors to our board of directors.

These and other provisions contained in our certificate of incorporation and bylaws are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. However, these provisions could delay or discourage transactions involving an actual or potential change in control of us or our management, including transactions in which our stockholders might otherwise receive a premium for their shares over market price of our stock and may limit the ability of stockholders to remove our current management or approve transactions that our stockholders may deem to be in their best interests and, therefore, could adversely affect the price of our common stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is BNY Mellon Shareowner Services, LLC. Its address is 400 South Hope Street, Suite 400, Los Angeles, California 90071.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock or debt securities in one or more series. We may issue warrants independently or together with common stock or debt securities, and the warrants may be attached to or separate from these securities. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We have filed forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered as exhibits to the registration statement of which this prospectus is a part. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock, the number of shares of common stock purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;

- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of 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.

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that 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 offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indentures, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

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. The indentures will be qualified under the Trust Indenture Act of 1939. We use the term “debenture trustee” to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable. We have filed forms of indentures to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

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 of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indentures that contain the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, the terms and who the depositary will be;
- the maturity date;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- whether the indenture will restrict our ability and/or the ability of our subsidiaries to:
  - incur additional indebtedness;
  - issue additional securities;
  - create liens;
  - pay dividends and make distributions in respect of our capital stock and the capital stock of our subsidiaries;
  - redeem capital stock;
  - place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;
  - make investments or other restricted payments;
  - sell or otherwise dispose of assets;
  - enter into sale-leaseback transactions;
  - engage in transactions with stockholders and affiliates;
  - issue or sell stock of our subsidiaries; or
  - effect a consolidation or merger;
- whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

- a discussion of any material United States federal income tax considerations applicable to the debt securities;
- information describing any book-entry features;
- provisions for a sinking fund purchase or other analogous fund, if any;
- the applicability of the provisions in the indenture on discharge;
- whether the debt securities are to be offered at a price such that they will be deemed to be offered at an "original issue discount" as defined in paragraph (a) of Section 1273 of the Internal Revenue Code;
- the denominations in which we will issue the series of debt securities, if other than denominations of $1,000 and any integral multiple thereof;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities, if applicable. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable 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 that 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 Under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended or deferred;

- if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable and the time for payment has not been extended or delayed;
- if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the debenture trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the debenture trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the debenture trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the debenture trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in 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 debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act of 1939, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the debenture trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and
- the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the debenture trustee regarding our compliance with specified covenants in the indentures.

Modification of Indenture; Waiver

We and the debenture trustee may change an indenture without the consent of any holders with respect to specific matters:

- to fix any ambiguity, defect or inconsistency in the indenture;
- to comply with the provisions described above under “Description of Debt Securities—Consolidation, Merger or Sale;”
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act of 1939;
- to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under “Description of Debt Securities—General” to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment hereunder by a successor trustee;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities and to make all appropriate changes for such purpose;
- to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default; or
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the debenture trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities; or

- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the debenture trustee;
- compensate and indemnify the debenture trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the debenture trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of $1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, or DTC, or another depositary named by us and identified in a prospectus supplement with respect to that series. See “Legal Ownership of Securities” for a further description of the terms relating to any book-entry securities.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the

office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

Subordination of Subordinated Debt Securities

The subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue, nor does it limit us from issuing any other secured or unsecured debt.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depository or warrant agent maintain for this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities.

As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depositary or its participants. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a book-entry security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in "street name." Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the

case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, DTC will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under "Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the

global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

- An investor cannot cause the securities to be registered in his or her name and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below.
- An investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above.
- An investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form.
- An investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective.
- The depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security. We and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security. We and the trustee also do not supervise the depositary in any way.
- The depositary may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well.
- Financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations when a Global Security Will Be Terminated

In a few special situations described below, the global security will terminate, and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

The global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell our securities covered by this prospectus in any of three ways (or in any combination):

- to or through underwriters or dealers;
- directly to one or more purchasers; or
- through agents.

We may distribute the securities:

- from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to the prevailing market prices; or
- at negotiated prices.

Each time we offer and sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms of the offering, including:

- the name or names of any underwriters, dealers or agents;
- the amounts of securities underwritten or purchased by each of them;
- the purchase price of securities and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any underwriting discounts or commissions or agency fees and other items constituting underwriters' or agents' compensation;
- the public offering price of the securities;
- any discounts, commissions or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time. 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 obligations of the underwriter, dealer or agent in the applicable prospectus supplement.

Underwriters or dealers may offer and sell the offered securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. If underwriters or dealers are used in the sale of any securities, the securities will be acquired by the underwriters or dealers for their own account and may be resold from time to time in one or more transactions described above. The securities may be either offered to the public through underwriting

syndicates represented by managing underwriters, or directly by underwriters or dealers. Generally, the underwriters' or dealers' obligations to purchase the securities will be subject to certain conditions precedent. The underwriters or dealers will be obligated to purchase all of the securities if they purchase any of the securities, unless otherwise specified in the prospectus supplement. We may use underwriters with whom we have a material relationship. We will describe the nature of any such relationship in the prospectus supplement, naming the underwriter.

We may sell the securities through agents from time to time. The prospectus supplement will name any agent involved in the offer or sale of the securities and any commissions we pay to them. Generally, any agent will be acting on a best efforts basis for the period of its appointment. We may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase the securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

Agents, dealers and underwriters may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the agents, dealers or underwriters may be required to make in respect thereof. Agents, dealers and underwriters may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. This short sales position may involve either "covered" short sales or "naked" short sales. Covered short sales are short sales made in an amount not greater than the underwriters' over-allotment option to purchase additional securities in this offering described above. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing securities in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market, as compared to the price at which they may purchase securities through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the securities that could adversely affect investors who purchase securities in this offering. Stabilizing transactions permit bids to purchase the underlying security for the purpose of fixing the price of the security so long as the stabilizing bids do not exceed a specified maximum. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions.

Similar to other purchase transactions, an underwriter's purchase to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of our securities may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of the securities if it discourages resales of the securities.

Neither we nor the underwriters makes any representation or prediction as to the effect that the transactions described above may have on the price of the securities. If such transactions are commenced, they may be discontinued without notice at any time.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by Cooley LLP, San Diego, California.

EXPERTS

The financial statements incorporated in this Prospectus by reference from the Company's Annual Report on Form 10-K and the effectiveness of MannKind Corporation's internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Such financial statements and financial statement schedules have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities we are offering under this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits which are part of the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. Our SEC filings are also available at the SEC's website at www.sec.gov. We maintain a website at www.mannkindcorp.com. Information contained in our website does not constitute a part of this prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" 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 an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this registration statement and prospectus the documents listed below, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement but prior to effectiveness of the registration statement and after the date of this prospectus but prior to the termination of the offering of the securities covered by this prospectus (other than current reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our Annual Report on Form 10-K for the year ended December 31, 2009, which was filed on March 16, 2010;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, which was filed on April 30, 2010;

- our Current Report on Form 8-K filed on March 1, 2010;
- our Definitive Proxy Statement on Schedule 14A, which was filed on April 30, 2010; and
- the description of our common stock set forth in our registration statement on Form 8-A, filed with the SEC on July 23, 2004, including any amendments or reports filed for the purposes of updating this description.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

Investor Relations
MannKind Corporation
28903 North Avenue Paine
Valencia, CA 91355
(661) 775-5300

Table of Contents

9,000,000 Shares

MannKind Corporation

Common Stock

PROSPECTUS SUPPLEMENT

BofA Merrill Lynch

August 18, 2010