

NANOGEN INC
 Form 424B5
 August 27, 2007
Table of Contents

Filed pursuant to Rule 424(b)(5)

Registration File No.: 333-144880

Prospectus Supplement

(To prospectus dated August 2, 2007)

NANOGEN, INC.

\$20,000,000

6.25% Senior Convertible Notes Due 2010,

Warrants to Purchase Common Stock,

Common Stock Issuable upon Conversion of such Notes, and

Common Stock Issuable upon Exercise of such Warrants

We are offering \$20.0 million in aggregate principal amount of our unsecured senior convertible notes, or the Notes, convertible initially into an aggregate of 15,748,030 shares of our common stock. In addition, we are issuing Series A Warrants, Series B Warrants and Series C Warrants to purchase shares of our common stock, or the Warrants, exercisable initially into an aggregate of 11,023,621 shares of our common stock, and may become exercisable for an additional 6,299,212 shares of our common stock. We are also offering shares of our common stock issuable upon conversion of the Notes and exercise of the Warrants. This prospectus also relates to the potential issuance by us of shares of common stock to the holders of Notes in payment of interest on the Notes. For each \$100 of Notes purchased by an investor, the investor also will receive a Series A Warrant to purchase 31.49606 shares of common stock, a Series B Warrant to purchase 31.49606 shares of common stock and a Series C Warrant to purchase 23.622045 shares of common stock. The Notes and Warrants are immediately separable after the sale. Neither the Notes nor the Warrants are listed on a national exchange or included in any automated quotation system.

Our common stock is traded on the NASDAQ Global Market under the symbol NGEN. On August 24, 2007, the last reported sale price of our common stock on the NASDAQ Global Market was \$1.13 per share.

Investing in our securities involves a high degree of risk. See Risk factors beginning on page S-9 of this prospectus supplement.

Seven Hills Partners LLC has agreed to act as agent for us in connection with the arrangement of this transaction on a best efforts basis. We have agreed to pay Seven Hills Partners LLC the aggregate placement agent fee set forth in the table below. See Plan of Distribution beginning on page S-45 of this prospectus supplement for more information regarding this arrangement.

| | Per Note | Total |
|---|----------|---------------|
| Offering price | 100% | \$ 20,000,000 |
| Placement agent fees | 4.8% | \$ 960,000 |
| Proceeds, before expenses, to Nanogen, Inc. | 95.2% | \$ 19,040,000 |

The placement agent is not purchasing or selling any of the Notes or Warrants pursuant to this prospectus supplement or the accompanying prospectus. We may determine to sell less than the maximum amount of Notes and Warrants offered pursuant to this prospectus supplement and

the accompanying prospectus. We expect that delivery of the Notes and Warrants being offered pursuant to this prospectus supplement will be made to purchasers on or about August 27, 2007. Funds from purchasers will be deposited into an escrow account and held until jointly released by us and the placement agent on the date the Notes and Warrants are to be delivered to the purchasers. All such funds received will be held in a non-interest bearing account.

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

SEVEN HILLS PARTNERS LLC

The date of this prospectus supplement is August 24, 2007.

Table of Contents

**TABLE OF CONTENTS
PROSPECTUS SUPPLEMENT**

| | Page |
|--|-------------|
| <u>FORWARD-LOOKING STATEMENTS</u> | S-i |
| <u>ABOUT THIS PROSPECTUS SUPPLEMENT</u> | S-1 |
| <u>SUMMARY</u> | S-2 |
| <u>THE OFFERING</u> | S-3 |
| <u>RISK FACTORS</u> | S-9 |
| <u>RATIO OF EARNINGS TO FIXED CHARGES</u> | S-14 |
| <u>USE OF PROCEEDS</u> | S-14 |
| <u>DESCRIPTION OF NOTES</u> | S-15 |
| <u>DESCRIPTION OF WARRANTS</u> | S-29 |
| <u>CERTAIN U.S. FEDERAL TAX CONSIDERATIONS</u> | S-34 |
| <u>PLAN OF DISTRIBUTION</u> | S-45 |
| <u>LEGAL MATTERS</u> | S-47 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | S-47 |
| <u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u> | S-47 |
| PROSPECTUS | |

| | Page |
|--|-------------|
| <u>FORWARD-LOOKING STATEMENTS</u> | i |
| <u>ABOUT THIS PROSPECTUS</u> | 1 |
| <u>NANOGEN, INC.</u> | 1 |
| <u>RISK FACTORS</u> | 2 |
| <u>USE OF PROCEEDS</u> | 2 |
| <u>RATIO OF EARNINGS TO FIXED CHARGES</u> | 2 |
| <u>PLAN OF DISTRIBUTION</u> | 2 |
| <u>THE SECURITIES WE MAY OFFER</u> | 5 |
| <u>DESCRIPTION OF CAPITAL STOCK</u> | 5 |
| <u>DESCRIPTION OF DEBT SECURITIES</u> | 8 |
| <u>DESCRIPTION OF WARRANTS</u> | 9 |
| <u>LEGAL MATTERS</u> | 10 |
| <u>EXPERTS</u> | 10 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | 11 |
| <u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u> | 11 |

Table of Contents

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, and the documents incorporated herein and therein by reference include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (or the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (or the Exchange Act). All statements other than statements of historical fact are forward-looking statements for purposes of these provisions, including any projections of earnings, revenues or other financial items, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding future economic conditions or performance, any statements relating to future regulatory action, and any statement of assumptions underlying any of the foregoing. In some cases, forward-looking statements can be identified by the use of terminology such as may, should, could, would, will, believes, intends, expects, plans, anticipates, estimates, potential, or continue or the n comparable terminology. Although we believe that the expectations reflected in the forward-looking statements contained in this prospectus supplement and the accompanying prospectus and in the incorporated documents are reasonable, we cannot assure you that such expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from those projected or assumed in the forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including but not limited to those set forth herein under the heading Risk Factors and those discussed in documents we incorporate by reference into this prospectus supplement and the accompanying prospectus and for the reasons described elsewhere in this prospectus supplement and the accompanying prospectus.

We will not update these forward-looking statements, whether as a result of new information, future events or otherwise. You should, however, review additional disclosures we make in our quarterly reports on Form 10-Q, current reports on Form 8-K and annual reports on Form 10-K filed with the SEC.

Table of Contents

A BOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus dated August 2, 2007 are part of a registration statement on Form S-3 (File No. 333-144880) we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under this shelf registration process, we may from time to time sell any combination of securities described in the accompanying prospectus in one or more offerings up to a total of \$50,000,000. Immediately prior to the offering, we also filed a related registration statement on Form S-3 pursuant to Rule 462(b) under the Securities Act to increase the total amount available under the shelf to \$60,000,000.

These documents contain important information you should consider when making your investment decision. The accompanying prospectus provides you with a general description of the securities we may offer. This prospectus supplement contains information about the securities issued in this offering. This prospectus supplement may add, update or change information in the accompanying prospectus. You should rely only on the information provided in this prospectus supplement, the accompanying prospectus or incorporated by reference in this prospectus supplement or the accompanying prospectus. We have not authorized anyone to provide you with any other information.

This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy the securities offered hereby in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation.

The information contained in the prospectus and the prospectus supplement is accurate only as of the date of the prospectus and the prospectus supplement, regardless of the time of delivery of this prospectus supplement or of any sale of the securities.

Table of Contents

SUMMARY

This summary highlights information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary does not contain all of the information that you should consider before deciding to invest in the securities. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the Risk Factors section contained on page S-9 of this prospectus supplement and the Risk Factors section on page 2 of the accompanying prospectus, and our consolidated financial statements and the related notes and the other documents incorporated by reference in this prospectus supplement and the accompanying prospectus.

Our company is based on the vision of providing a higher quality of healthcare through advanced diagnostic products. Our business strategy is to assemble the companies, products and knowledge base to become a leading supplier of the technologies and products that will help drive a new era of personalized medicine. We were early to recognize that the adoption of personalized medicine is dependent on the advancement of diagnostic technologies. We believe that the commercialization of our products and technologies will help bridge the gap between early-stage scientific research and actual clinical practice. We are developing several product lines that are directly targeting specific markets within the advanced diagnostics field that have significant potential for revenue growth. We see recent successes and a growing capability in the clinical laboratories' ability to perform accurate advanced diagnostic testing as a strong validation of our strategy. In addition, the Federal Drug Administration has recently released guidance encouraging the generation of more pharmacogenomics data and molecular diagnostic testing during drug development and clinical trials, and before the use of medications. We believe these applications of advanced diagnostics will help build demand for our products and technologies.

We were incorporated under the laws of the State of Delaware and our stock is listed on the Nasdaq Global Market under the symbol **NGEN**. Our corporate offices are located at 10398 Pacific Center Court, San Diego, California 92121. Our main telephone number is 858-410-4600.

For further information regarding us and our financial information, you should refer to our recent filings with the SEC. See **Where You Can Find More Information** and **Incorporation of Certain Documents by Reference** in this prospectus supplement.

Table of Contents

THE OFFERING

| | |
|---|---|
| Issuer | Nanogen, Inc. |
| Securities Offered | We are offering up to \$20,000,000 in aggregate principal amount of our 6.25% senior convertible notes due 2010 (the "Notes") convertible initially into an aggregate of 15,748,030 shares of our common stock, and Series A Warrants, Series B Warrants and Series C Warrants to purchase shares of our common stock, exercisable initially into an aggregate of 11,023,621 shares of our common stock, and may become exercisable for an additional 6,299,212 shares of our common stock. The Warrants represent 110% of the shares of common stock issuable upon conversion of the Notes based on the initial conversion price of \$1.27. In addition, we are offering shares of common stock issuable to the holder of a Note or Warrant upon conversion of the Note or exercise of the Warrant, and shares of common stock that may be issued in payment of interest on the Notes. |
| Purchase Price | For each \$100 of Notes purchased by an investor, the investor also will receive a Series A Warrant to purchase 31.49606 shares of common stock, a Series B Warrant to purchase 31.49606 shares of common stock and a Series C Warrant to purchase 23.622045 shares of common stock. The Notes and Warrants are immediately separable after the sale. |
| Use of Proceeds | We intend to use the net proceeds from this offering for working capital, acquisitions and other general corporate purposes, including the development and support of our sales and marketing organization, support for our continuing research and development efforts and, if opportunities arise, to acquire businesses, products, technologies or licenses that are complementary to our business and make strategic investments in businesses complementary to our business. See "Use of Proceeds" on page S-14. |
| Outstanding Shares of Common Stock | The number of shares of our common stock outstanding immediately prior to this offering is 73,050,915. Assuming conversion of all of the Notes sold in this offering at the initial conversion price of \$1.27, and exercise of all of the Warrants sold in this offering, the total number of shares of our common stock to be outstanding will be 106,121,778. |
| Risk Factors | An investment in the Notes and Warrants involves a high degree of risk. See "Risk Factors" beginning on page S-9 of this prospectus supplement and page 2 of the accompanying prospectus for a discussion of certain factors that you should consider when evaluating an investment in the Notes, Warrants and the underlying common stock. |

Table of Contents

Summary of the Notes

(See the section entitled "Description of Notes" on page S-15 of this prospectus supplement)

| | |
|--|---|
| Notes Offered | \$20.0 million in aggregate principal amount of unsecured senior convertible notes. |
| Maturity Date | Third anniversary of date of issuance, subject to extension under certain circumstances, including extension for an additional two-year period with respect to any amounts not converted as of the initial maturity date due to limitations on beneficial ownership. |
| Interest | Interest accrues on the Notes at an annual rate of 6.25% payable quarterly, in arrears, commencing on September 30, 2007. The interest may be paid, subject to certain conditions, in cash or shares of our common stock, or a combination of cash and shares of common stock. Upon and during the occurrence of an event of default, the interest rate under the Notes will increase to 12% per annum. |
| Conversion Price and Adjustment | <p>The principal amount of the Notes, together with any accrued and unpaid interest and any late charges and an interest make-whole, is convertible by the holders of the Notes, at any time following their issuance, into shares of our common stock at an initial conversion price of \$1.27 per share, subject to certain limitations on beneficial ownership.</p> <p>The conversion price is subject to certain adjustments set forth in the Indenture governing the Notes, including, without limitation, full ratchet anti-dilution protection for any equity or convertible securities issuances within 18 months of the issuance of the Notes and weighted-average anti-dilution protection thereafter, subject to customary exceptions and a limitation on the reduction of the conversion price below a \$1.2675 floor price without subsequent stockholder approval.</p> |
| Letter of Credit | <p>We have agreed to obtain a letter of credit from Wells Fargo Bank in the amount of \$7.0 million for the benefit of the holders. The letter of credit will permit the agent for the holders of the Notes to draw the letter of credit if an event of default exists or at maturity. The proceeds drawn under the letter of credit will be applied to reduce our payment obligations under the Notes.</p> <p>The letter of credit will be terminated if we meet certain conditions, which include, but are not limited to, all of the following: (i) the closing sales price of our common stock on the NASDAQ Global Market equals or exceeds \$1.524 per share for 20 out of 30 consecutive trading days; (ii) there is no event of default under the indenture governing the Notes; (iii) our common stock has not been suspended for trading on NASDAQ; and (iv) we have been in compliance with other transaction documents for this offering.</p> |

Table of Contents

At closing, we will deposit \$7.3 million of the total \$20.0 million proceeds from the offering in a cash collateral account with Wells Fargo Bank to secure the letter of credit. The funds in the cash collateral account will be released to us upon the termination of the letter of credit. The Notes are not secured by any of our assets or assets of our subsidiaries, except that we have agreed to obtain the letter of credit for the benefit of the purchasers.

Mandatory Conversion

If, at any time after the 24-month anniversary of the issuance date of the Notes, the last closing sale price of our common stock on the NASDAQ Global Market exceeds \$2.2225 per share for any 20 out of 30 consecutive trading days, then we will have the right, subject to compliance with certain conditions, which include, but are not limited to, our continued listing on an eligible trading market, compliance with certain covenants and the lack of occurrence of an event of default, to require the holders of the Notes to convert all or any portion of the conversion amount of the Notes into shares of common stock at the then-applicable conversion price, subject to certain limitations on beneficial ownership.

Events of Default

The Notes will contain customary event of default provisions, including without limitation, failure to pay principal or interest when due, suspension from trading, failure to cure conversion failures or maintain sufficient shares of common stock available for conversion, breaches of covenants, breaches of material representations, failure to repay certain indebtedness exceeding \$250,000, the occurrence of bankruptcy or similar events, defaults under our agreements, and the rendering of a final judgment in excess of \$500,000 not covered by insurance.

After the occurrence of an event of default, any holder may require us to redeem all or a portion of such holder's Note at a redemption price in cash equal to the greater of (i) the product of (x) the conversion amount of the Notes to be redeemed and (y) the applicable redemption premium (120%), and (ii) the product of (A) the applicable conversion amount of the Notes to be redeemed divided by the conversion price in effect at such time as the holder delivers the redemption notice and (B) the greater of (1) closing sale price of the common stock on the date immediately preceding the event of default, and (2) the closing sale price of the common stock on the date immediately after the event of default and (3) the closing sale price of the common stock on the date the holder delivers the redemption notice.

Change of Control

In connection with a change of control transaction, the holders of the Notes will have the right to require us to redeem all of their Notes at a redemption price in cash equal to the sum of (1) unpaid interest and late charges and (2) the greater of (i) the product of (x) the conversion amount (not including interest and late charges) of the Notes being redeemed and (y) the quotient determined by dividing (A) the greater

Table of Contents

of the closing sale price of the common stock immediately prior to the consummation of the change of control, the closing sale price of the common stock immediately following the public announcement of such proposed change of control and the closing sale price of the common stock immediately prior to the public announcement of such proposed change of control by (B) the then applicable conversion price, and (ii) 120% of the conversion amount (not including interest and late charges) of the Notes being redeemed.

In the event of a change of control, we have the right to redeem all of the Notes at a price in cash equal to the sum of (1) unpaid interest and late charges and (2) the greater of (i) the product of (x) the conversion amount (not including interest and late charges) of the Notes being redeemed and (y) the quotient determined by dividing (A) the greater of the closing sale price of the common stock immediately prior to the consummation of the change of control, the closing sale price of the common stock immediately following the public announcement of such proposed change of control and the closing sale price of the common stock immediately prior to the public announcement of such proposed change of control by (B) the then applicable conversion price, and (ii) 120% (if the acquirer is not a publicly traded company) or 140% (if the acquirer is a publicly traded company) of the conversion amount (not including interest and late charges) of the Notes being redeemed.

Fundamental Transactions

For fundamental transactions generally, subject to the foregoing change of control provisions, we will be required to reaffirm to the holders of Notes our obligations under the Notes and other transaction documents for the offering as well as to provide a confirmation that following the consummation of the fundamental transaction, the Notes will be convertible into either (i) our common stock or other shares of publicly traded common stock (or their equivalent) of the Company, or the Company as a successor entity, or (ii) if we are not a publicly traded entity following the fundamental transaction, the securities or other cash or assets that holders of the Notes would have received had they converted the Notes immediately prior to the consummation of the fundamental transaction.

Covenants

The Notes will contain covenants which, among other things, restrict our ability to (i) incur additional indebtedness other than in connection with existing indebtedness or certain other permitted indebtedness under the terms of the Indenture, (ii) grant liens on our assets other than certain ordinary permitted liens; or (iii) make distributions on or repurchase shares of our common stock.

Late Charges

If any payment of principal, interest or other amounts payable under the Notes or other transaction documents in the offering are not paid when due, such past due amount are subject to a late charge of 15% per annum from the date due until paid.

Table of Contents

Summary of Warrants

(See the section entitled "Description of the Warrants" on page S-29 of this prospectus supplement)

Warrants Offered

Series A Warrants, Series B Warrants and Series C Warrants to purchase initially an aggregate of 17,322,833 share of our common stock. All Warrants are exercisable into shares of our common stock, subject to certain limitations on beneficial ownership. Series B Warrants are exercisable only if certain conditions relating to Series A Warrants are satisfied, as described below.

Exercise Amount and Price

The initial exercise price of Series A Warrants is \$1.14.

If any of the Series A Warrants are exercised, whether at the option of the holders or following the exercise of our rights to require holders to exercise, then Series B Warrants will become exercisable. The number of exercisable Series B Warrants will equal the number of Series A Warrants exercised. With respect to Series B Warrants that become exercisable in any calendar quarter, the exercise price will be equal to 110% of the closing sales price of our common stock on the last trading day of such calendar quarter. On the date when all of Series A Warrants are exercised, the exercise price for any previously unexercised Series B Warrants will be equal to 110% of the closing sales price of our common stock on such date. The exercise price of the Series B Warrants is subject to a floor, so that its exercise price cannot be less than \$1.13 per share without stockholder approval.

The initial exercise price of Series C Warrants is \$1.14.

Expiration Dates

Series A Warrants and Series C Warrants are exercisable at any time from the date of issuance until the fifth (5th) anniversary of the date of issuance. Series B Warrants are exercisable from the date on which they become exercisable until the third (3rd) anniversary of such date.

Mandatory Exercise Rights

At any time following the termination of the letter of credit, if the closing sales price of our common stock is at least 135% of the applicable exercise price of Series A Warrants for 20 out of 30 consecutive trading days, we may, subject to certain conditions, require the holders to exercise the Series A Warrants.

After six months following the issuance date of the Warrants, and at least thirty (30) trading days following (i) the exercise of all of the Series A Warrants and (ii) termination of the letter of credit, if the closing sales price of our common stock is at least 125% of the exercise price of Series C Warrants for 20 out of 30 consecutive trading days, we may, subject to certain conditions, require the holders to exercise the Series C Warrants.

Exercise Price Adjustment

The exercise price of the Warrants is subject to certain adjustments set forth in the Warrants, including, without limitation, full ratchet

Table of Contents

anti-dilution protection for any equity or convertible securities issuances within eighteen (18) months of the issuance of the Warrants and weighted-average anti-dilution protection thereafter, subject to customary exceptions and a limitation on the reduction of the exercise price below \$1.13 without stockholder approval.

Fundamental Transaction

In the event of a fundamental transaction (as defined in the Warrants), the Warrant holder may require us to purchase the Warrant for cash at a price equal to the value of the remaining unexercised portion of the Warrant determined using the Black-Scholes Option Pricing Model. For fundamental transactions generally, subject to the foregoing provision, we will be required to reaffirm to the holders our obligations under the financing agreements as well as to provide a confirmation that following the consummation of the fundamental transaction, the Warrant will be exercisable into either (i) our common stock or other shares of publicly traded common stock (or their equivalent) of the Company, or the Company as the successor entity, or (ii) if we are not a publicly traded entity following the fundamental transaction, the securities or other cash or assets that the holder of the Warrant would have received had it exercised the Warrant immediately prior to the consummation of the fundamental transaction.

Cashless Exercise; Payments for Failure to Deliver Shares

The Warrants may only be exercised on a cashless exercise basis if the registration statement covering the issuance of shares upon exercise of the Warrants is not available at the time of exercise of such Warrants. The Warrants contain provisions requiring us to make cash payments to a Warrant holder in amounts described in the Warrants for failure to timely deliver shares of common stock upon exercise all or a portion of the Warrant by a holder.

Table of Contents

RISK FACTORS

An investment in our securities offered through this prospectus supplement and the accompanying prospectus involves certain risks. You should carefully consider the specific risks relating to this offering, the Notes and the Warrants set forth below and relating to our business set forth under the caption "Risk Factors" in our filings with the Securities and Exchange Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, incorporated by reference herein, before making an investment decision. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also affect our business operations.

Risks Related to this Offering and the Notes and Warrants

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

We have not designated the amount of net proceeds we will use for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our profitability or our market value. See "Use of Proceeds" at page S-14 for a description of our management's intended use of the proceeds from this offering.

Our substantial indebtedness after the completion of the offering could adversely affect our financial condition and our ability to respond to changes in our business.

We will be highly leveraged and have significant debt service obligations following the completion of this offering. The increased debt obligations could have significant negative consequences, including, but not limited to:

increasing our vulnerability to general adverse economic and industry conditions;

limiting our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions or other business purposes;

limiting our flexibility to plan for, or react to, changes in our business and the industry in which we compete;

placing us at a possible competitive disadvantage to competitors with fewer debt obligations and competitors that have better access to capital resources; and

requiring us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital expenditures, research and development efforts and other general corporate purposes.

The Notes provide that upon the occurrence of various events of default and change of control transactions, the holders would be entitled to require us to redeem the Notes for cash. We may not have the funds necessary to redeem the Notes for cash, or any such redemption of the Notes could leave us with little or no working capital for operations or capital expenditures.

The Notes allow each holder to require us to redeem the Notes upon the occurrence of various events of default, such as the termination of trading of our common stock on a qualified stock market or a breach by us of the covenants set forth in the Indenture and in other agreements, such as covenants that restrict our ability to incur additional indebtedness, grant liens on our assets or make distributions on or repurchase shares of our common stock. The Notes will also allow each holder to require us to redeem the Notes upon specified change of control transactions. In such a situation, we may be required to redeem all or part of the Notes, including any

Table of Contents

accrued interest, redemption premium and penalties. Some of the events of default include matters over which we may have little or no control. If an event of default or a change of control occurs, we may be unable to repay the full price in cash. Even if we were able to prepay the full amount in cash, any such repayment could leave us with little or no working capital for our business. We have not established a sinking fund for payment of our obligations under our Notes, nor do we anticipate doing so. In addition, upon the occurrence of an event of default, the holders may draw under the letter of credit, in which case we will lose access to the funds in the cash collateral account, which will have an adverse effect on our ability to meet our cash needs and payment obligations.

We may not have sufficient funds to make required payments on the Notes.

Our liquidity position is constrained by the operating losses from our business, and we expect to incur net operating losses for the foreseeable future. As a result, we may not have sufficient funds to make the interest (if we are required to pay interest in cash) and principal payments on the Notes when due, either at maturity or upon the occurrence of various events of default or specified change of control transactions. Neither the Indenture nor the terms of the Notes require us to achieve or maintain any minimum financial ratios relating to our financial position or results of operations. If we do not have sufficient funds to make these payments, we will have to obtain an alternative source of funds, including sales of our assets or assets of our subsidiaries, sales of our equity securities or capital or debt securities. We cannot assure you that we will be able to obtain sufficient funds to meet our payment obligations under the Notes through any of these alternatives. Failure to do so will have a material adverse effect on our business, financial position and results of operations.

If we are not able to access the funds in the cash collateral account, it will adversely affect our cash flow, financial results and our ability to meet payment obligations.

We have agreed to initially deposit \$7.3 million of the total \$20 million purchase price of the Notes in a cash collateral account for the purpose of securing the letter of credit issued in favor of the holders of the Notes. The funds in the cash collateral account, including interests earned, will be released to us only if we meet certain conditions to terminate the letter of credit. These conditions include, but are not limited to, all of the following: (i) the closing sales price of our common stock on the NASDAQ Global Market equal to or exceeds \$1.524 per share for 20 out of 30 consecutive trading days; (ii) there is no event of default under the Indenture; and (iii) our common stock has not been suspended from trading on NASDAQ Global Market. There is no guarantee that we will meet all of the conditions for the termination of the letter of credit. In addition, there is no guarantee that the price of our common stock will reach the target level described above, and even if it does, there is no assurance that the price will maintain at such level for the required period of time. If the price of our common stock does not meet this requirement or if we cannot meet any of the conditions, we will not have access to the funds in the cash collateral account, which will adversely affect our cash flow, financial results and our ability to meet payment obligations under the Notes.

We may not be able to refinance the Notes if required or if we so desire.

We may need or desire to refinance all or a portion of the Notes or any other future indebtedness that we incur on or before the maturity of the Notes. There can be no assurance that we will be able to refinance any of our indebtedness on commercially reasonable terms, if at all. If we are unable to generate sufficient cash flow or refinance our debt on favorable terms, it could adversely affect our financial condition.

There are certain conversion and exercise restrictions associated with the Notes and the Warrants.

The Notes and the Warrants may not be converted or exercised if the holder of the respective security (together with its affiliates) would beneficially own in excess of 4.99% of our outstanding common stock following such exercise or conversion. By written notice to us, the holders may increase this percentage not in excess of 9.99%.

Table of Contents

The Notes and Warrants are new issue of securities, and there is no existing market for the Notes and the Warrants.

We do not intend to apply for listing of the Notes or the Warrants on any securities exchange or for quotation of the Notes on any automated dealer quotation system. A market may not develop for the Notes or the Warrants, and if a market does develop, it may not be sufficiently liquid for your purposes. If an active, liquid market does not develop for the Notes and Warrants, the market price and liquidity of the Notes and Warrants may be adversely affected. If any of the Notes and Warrants are traded after their initial issuance, they may trade at a discount from their initial offering price.

The liquidity of the trading market, if any, and future trading prices of the Notes and Warrants will depend on many factors, including, among other things, the market price of our common stock, prevailing interest rates, our operating results, financial performance and prospects, the market for similar securities and the overall securities market, and may be adversely affected by unfavorable changes in these factors. Historically, the market for convertible debt has been subject to disruptions that have caused volatility in prices. The market for the Notes and Warrants may be subject to disruptions that could have a negative effect on the holders of the Notes, regardless of our operating results, financial performance or prospects.

The right of holders of Notes to receive payments on the Notes is effectively subordinated to all existing and future liabilities of our subsidiaries and to all of our existing and future secured debt.

None of our subsidiaries will guarantee our obligations under, or have any obligation to pay any amounts due on, the Notes. As a result, the Notes will be effectively subordinated to all liabilities of our subsidiaries. Our rights and the rights of our creditors, including holders of the Notes, to participate in the distribution of the assets of any of our subsidiaries upon their liquidation or recapitalization will generally be subject to the prior claims of those subsidiaries' creditors. In addition, the Notes will not be secured by any of our assets or those of our subsidiaries, except that we have agreed to obtain the letter of credit for the benefit of the purchasers. As a result, the Notes will be effectively subordinated to any secured debt we may incur. In any liquidation, dissolution, bankruptcy or other similar proceeding, holders of our secured debt may assert rights against any assets securing such debt in order to receive full payment of their debt before those assets may be used to pay the holders of the Notes. In such an event, we may not have sufficient assets remaining to pay amounts due on any or all of the Notes.

Conversion of the Notes and exercise of Warrants and issuance of shares of common stock in payment of interests on the Notes will dilute the ownership interest of existing stockholders, including holders who had previously converted their Notes.

The conversion or exercise of some or all of the Notes and Warrants, respectively, and the issuance of shares of common stock in payment of interests on the Notes, could significantly dilute the ownership interests of existing stockholders. Any sales in the public market of the common stock issuable upon such conversion or exercise could adversely affect prevailing market prices of our common stock. In addition, the existence of the Notes may encourage short selling by market participants because the conversion of the Notes could be used to satisfy short positions, or anticipated conversion of the Notes into shares of our common stock could depress the price of our common stock.

We have agreed to certain limitations on our ability to sell our securities in future financings, which may restrict our ability to raise capital.

We have agreed, for so long as any Notes or Warrants remain outstanding, that we will not issue or sell, subject to certain exceptions, shares of our common stock for a consideration per share less than the conversion price of the Notes or the exercise price of the Warrants immediately prior to such sale, if the effect of the issuance or sale is to cause the conversion price or exercise price to be adjusted below the fixed floor prices set forth in the Indenture or the Warrant, or otherwise cause us to breach our obligations under applicable rules of NASDAQ. In addition, we have agreed, for so long as any Notes or Warrants remain outstanding, that we will

Table of Contents

not to sell subject to certain exceptions, securities with a conversion or exercise price that varies from the market price of our common stock. These limitations will restrict our ability to raise capital through equity financing in the future. If we cannot raise more capital or obtain additional financings on terms satisfactory to us, we will have to reduce our capital expenditures, scale back our development of new products, significantly reduce our workforce and seek to license to others products or technologies that we otherwise would seek to commercialize ourselves, which will have an adverse effect on our business operations and financial results.

Restrictive covenants in the Indenture governing the Notes may limit our ability to expand our operations and capitalize on our business opportunities.

The Indenture governing the Notes includes covenants which limit our ability to borrow money, create liens, and engage in certain other activities. These restrictive covenants may limit our ability to expand our operations and capitalize on business opportunities. If we are unable to expand our operation or otherwise capitalize on our business opportunities, our business, financial condition and results of operations could be materially adversely affected and we may not be able to meet our debt service obligations.

The Notes will likely be subject to the contingent payment debt instrument rules, and holders will likely be required to include amounts in income in excess of the stated interest payable on the Notes and may recognize ordinary income on a conversion of a Note. Gain recognized with respect to a Note will generally be treated as ordinary interest income.

We intend to take the position that the Notes will be subject to the contingent payment debt instrument rules. The application of those rules to instruments such as the Notes is uncertain, however, and no assurance can be given that the Internal Revenue Service, or IRS, will agree with the positions we intend to take. We have not sought or received an IRS ruling or an opinion of counsel regarding the application of the contingent payment debt instrument rules to the Notes. Each holder of a Note should consult its own tax advisor concerning the tax consequences of ownership and disposition of the Notes.

Under the contingent payment debt instrument rules, (i) each holder generally will be required to accrue interest on the Notes based on the yield of a comparable nonconvertible, noncontingent fixed-rate debt instrument with terms and conditions otherwise similar to the Notes (subject to certain adjustments to such accruals of income), with the result that a holder is likely to recognize taxable income in excess of the regular interest payments received while the Notes are outstanding, (ii) the amount realized by a holder upon the conversion of a Note (including the fair market value of common stock received upon conversion) would generally be treated as a contingent payment under the contingent payment debt instrument rules, which could result in the recognition of ordinary interest income on a conversion and (iii) any gain recognized on a sale, exchange, redemption or retirement of a Note generally would be treated as ordinary interest income (subject to potential adjustments) and any loss would generally be ordinary loss to the extent of interest previously included in income and, thereafter, capital loss.

We may need additional capital in the future. If additional capital is not available, we may have to curtail or cease operations.

The proceeds we will receive in the offering will not be sufficient to complete the research and development necessary to bring our products to market and to further our manufacturing and marketing capabilities. We may need to raise additional funds, and we may seek such funds through public and private securities offerings, arrangements with corporate partners, borrowings under lease lines of credit or other sources. If we cannot raise more money, we will have to reduce our capital expenditures, scale back our development of new products, significantly reduce our workforce and seek to license to others products or technologies that we otherwise would seek to commercialize ourselves. The amount of money we will need will depend on many factors, including among others:

the amount of revenue we are able to generate;

the progress of our research and development programs;

Table of Contents

the commercial arrangements we may establish;

the time and costs involved in:

scaling up our manufacturing capabilities;

meeting regulatory requirements, including meeting necessary Quality System Regulations (QSRs) and obtaining necessary domestic and international regulatory clearances or approvals;

acquisition(s) or investment(s) into other businesses;

filing, prosecuting, defending and enforcing patent claims and litigation; and

the scope and results of our future clinical trials, if any.

Additional capital may not be available on terms acceptable to us, or at all. Any additional equity financing will be dilutive to stockholders, and debt financing, if available, may include restrictive covenants and require significant collateral.

We could lose our listing on the NASDAQ Global Market if our stock price falls below \$1.00 for 30 consecutive days, and the loss of the listing would make our stock significantly less liquid and would affect its value.

The Notes and Warrants are convertible into or exercisable for our shares of common stock. Our common stock is listed on the NASDAQ Global Market and NASDAQ's marketplace rules for continued listing on the NASDAQ Global Market require, among other things, that the bid price for our common stock not fall below \$1.00 per share for a period of 30 consecutive trading days. The closing bid price for our common stock on August 24, 2007 was \$1.13 per share. If, in the future, our minimum bid price is below \$1.00 for 30 consecutive trading days, under the current NASDAQ Global Market rules we will have a period of 180 days to attain compliance by meeting the minimum bid price requirement for 10 consecutive days during the compliance period. If our common stock fails to maintain a minimum bid price of \$1.00 for 30 consecutive days during a 180-day grace period on the NASDAQ Global Market, we could receive a delisting notice from the NASDAQ Global Market. Upon delisting from the NASDAQ Global Market, our stock would be traded over-the-counter, more commonly known as OTC. OTC transactions involve risks in addition to those associated with transactions in securities traded on the NASDAQ Global Market. Many OTC stocks trade less frequently and in smaller volumes than NASDAQ-listed stocks. Accordingly, our common stock would be less liquid than it would otherwise be. Also, the values of these stocks may be more volatile than NASDAQ-listed Stocks. In addition, our common stock could then potentially be subject to the SEC's penny stock rules, which place additional disclosure requirements on broker-dealers. These additional disclosure requirements may harm your ability to sell shares if it causes a decline in the ability or willingness of broker-dealers to sell our common stock. If our stock is traded in the OTC market and a market maker sponsors us, we may have the price of our stock electronically displayed on the OTC Bulletin Board, or OTCBB. However, if we lack sufficient market maker support for display on the OTCBB, we must have our price published by the National Quotations Bureau LLP in a paper publication known as the Pink Sheets. The marketability of our stock would be even more limited if our price must be published on the Pink Sheets.

Table of Contents**RATIO OF EARNINGS TO FIXED CHARGES**

The following table sets forth our ratio of earnings to fixed charges, and our coverage deficiency. We calculated the ratio of earnings to fixed charges by dividing earnings by total fixed charges. Earnings are defined as income (loss) before provision for income taxes and minority interest plus fixed charges less minority interest in pre-tax income of subsidiaries that have not incurred fixed charges. Fixed charges are defined as the sum of interest expensed plus amortized capitalized expenses related to indebtedness plus an estimate of the interest within rental expense. We do not currently have, and during the periods prescribed did not have, any preferred stock outstanding.

| (in thousands, unaudited) | For Year Ended December 31, | | | | | For Six Months Ended |
|---|-----------------------------|-------------|-------------|-------------|-------------|----------------------|
| | 2002 | 2003 | 2004 | 2005 | 2006 | June 30, 2007 |
| Ratio of Earnings to Fixed Charges(1) | | | | | | |
| Deficiency of earnings available to cover fixed charges | \$ (24,402) | \$ (32,413) | \$ (38,907) | \$ (96,494) | \$ (49,070) | \$ (26,379) |

(1) For all periods presented, earnings were insufficient to cover fixed charges

USE OF PROCEEDS

We estimate that the net proceeds we will receive from this offering, excluding the proceeds, if any, from the exercise of the Warrants issued in this offering, will be approximately \$19.04 million, after deducting the placement agent fees and estimated offering expenses. We would also receive additional funds in the event of any cash exercise of the Warrants. We are required at closing to deposit \$7.3 million in cash from the proceeds of the offering in a cash collateral account with Wells Fargo Bank to secure our reimbursement obligations in respect of the letter of credit. For more information about the letter of credit and the cash collateral account, see the section below entitled *Letter of Credit* under the heading *Description of Notes*.

We intend to use the net proceeds we receive from sales of the securities offered hereby for working capital, acquisitions and other general corporate purposes, including the development and support of our sales and marketing organization, support for our continuing research and development efforts and, if opportunities arise, to acquire businesses, products, technologies or licenses that are complementary to our business and make strategic investments in businesses complementary to our business. We periodically review acquisition and strategic investment opportunities that are related to our business and we believe that it is desirable to have funds on hand so as to be able to make acquisitions and strategic investments promptly. As of the date of this prospectus supplement, we have no specific agreements, understandings, commitments or arrangements with regard to any particular future acquisition or strategic investment, and no assurance can be given that we will be able to consummate any such acquisitions or strategic investments or that, if consummated, such acquisitions or investments would be on terms that are favorable to us.

Pending these uses, we intend to invest the proceeds of this offering in short-term, investment grade interest-bearing securities.

Table of Contents

DESCRIPTION OF NOTES

We will issue the Notes under an indenture to be dated on or about August 27, 2007 (the "base indenture") and a first supplemental indenture to be dated on or about August 27, 2007 (the "first supplemental indenture" and, together with the base indenture, the "Indenture") between us and The Bank of New York Trust Company, N.A. as trustee (the "Trustee"). We have summarized the material provisions of the Indenture below. The following description is not complete and is subject to, and qualified by reference to, all of the provisions of the Indenture and the Notes, which we urge you to read because they, and not this Description of Notes, define your rights as a Note holder. A copy of the Indenture and the Form of the Notes will be included as exhibits to a Current Report on Form 8-K that we will file with the SEC and that will be incorporated by reference into the registration statement of which this prospectus supplement forms a part. You may also request a copy of the Indenture and the Form of the Notes from us as described under "Where You Can Find More Information."

General

The Notes:

are in an aggregate principal amount of \$20 million;

are convertible, at the holder's option, into shares of our common stock at an initial conversion price of \$1.27 per share;

are redeemable, at the holder's option, upon the occurrence of an event of default or change of control transaction;

may be redeemed by us upon the occurrence of a change of control transaction;

bear interest at an annual rate of 6.25%, payable quarterly on the last day of March, June, September and December of each year (each, an "Interest Date"), with the first Interest Date being September 30, 2007;

are due and payable on August 27, 2010, unless earlier converted or redeemed, subject to extension for an additional two-year period with respect to amounts not converted as of the initial maturity date due to limitations on beneficial ownership;

are unsecured; and

are supported by a letter of credit.

Interest

Interest on the outstanding principal amount of the Notes shall be payable quarterly in arrears on each Interest Date. Interest shall accrue at 6.25% per annum from the most recent date to which interest has been paid, or if no interest has been paid, from August 24, 2007, until the principal amount of the Notes is paid. From and after the occurrence and during the continuance of an Event of Default (as defined in the section entitled "Redemption" below), the interest rate shall be increased to 12.0%. If such Event of Default is subsequently cured, the increased interest rate will cease to be effective as of the date of such cure; provided that the interest calculated at the increased rate during the continuance of such Event of Default will continue to apply. In addition, if any payment of principal or other amounts payable under the Notes or other transaction documents in the offering are not paid when due, such past due amount are subject to a late charge of 15% per annum from the date due until paid.

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Interest under the Notes will be payable on each Interest Date in shares of common stock so long as there has been no Equity Conditions Failure (as defined below in the section entitled *Conversion* below) unless the holder has waived such Equity Conditions Failure), in which case we would be required to pay the interest in cash. We may, at our option, pay interest in cash or a combination of common stock (so long as there has been no

S-15

Table of Contents

Equity Conditions Failure) and cash. If any interest is to be paid in common stock, then we will pay to each holder a number of shares of common stock equal to (I) the amount of interest payable on the applicable Interest Date in common stock divided by (II) the applicable interest conversion price, which shall equal the lower of (i) the applicable Conversion Price (as defined below) and (ii) the price computed as ninety percent (90%) of the average of the volume weighted average price for our common stock for the five (5) trading days ending on the trading day immediately preceding the Interest Date. However, if the resulting calculation of the interest conversion price would be less than \$1.13, then we must pay interest in cash.

We will deliver a written notice to each holder of the Notes on or prior to the tenth (10th) trading day prior to the Interest Date, and such notice will (A) either (x) confirm that interest to be paid on such Interest Date will be paid entirely in shares of common stock or (y) inform you of our election to pay interest in cash or a combination of cash and common stock and specify the amount of interest that shall be paid in cash and the amount of interest, if any, that will be paid in common stock and (B) certify that there has been no Equity Conditions Failure.

If we pay interest in shares of our common stock, we will (i) issue and deliver on the applicable Interest Date to the address set forth in the register maintained by our paying agent or to such address as specified by the holder in writing to us at least two (2) business days prior to the applicable Interest Date, an unlegended certificate, registered in the name of such holder or its designee, for the number of shares of common stock to which such holder shall be entitled and (ii) with respect to each Interest Date, pay to such holder, in cash by wire transfer of immediately available funds, the amount of any cash interest. We are not entitled to pay interest in common stock and will be required to pay all interest in cash if, unless consented to in writing by such holder, there has been an Equity Conditions Failure.

An **Equity Conditions Failure** means that on any day during the period commencing ten (10) trading days prior to the applicable date of determination (e.g., Interest Date or Mandatory Conversion Date (as defined below)) the following Equity Conditions have not been satisfied (or waived in writing by each holder).

on each day during the period beginning 60 days prior to the applicable date of determination and ending on and including the applicable date of determination (the **Equity Conditions Measuring Period**), all shares of common stock issuable upon conversion of the Notes, exercise of the Warrants and as interest shall be eligible for sale without restriction other than any restrictions on sale imposed on the holder by virtue of the holder being our affiliate;

during the Equity Conditions Measuring Period our common stock is designated for quotation on the NASDAQ Global Market or any other eligible market and shall not have been suspended from trading on such exchange or market, subject to certain exceptions, nor shall delisting or suspension by such exchange or market been threatened or pending either (A) in writing by such exchange or market or (B) by falling below the then effective minimum listing maintenance requirements of such exchange or market;

during the Equity Conditions Measuring Period, we shall have delivered shares upon conversion of the Notes and upon exercise of the Warrants to the holders on a timely basis;

any applicable shares of common stock to be issued in connection with the event requiring determination may be issued in full without violating the terms of the Notes and the rules or regulations of NASDAQ; provided, however, that in the event that such shares of common stock cannot be issued in full, we shall be permitted to issue to the holder the maximum amount of shares of common stock without causing any such violation;

during the six-month period preceding the applicable date of determination, we shall not have failed to timely make any payments within five business days of when such payment is due pursuant to any transaction document executed in connection with the offering of the Notes and the Warrants;

during the Equity Conditions Measuring Period, there shall not have occurred either (i) the public announcement of a pending, proposed or intended Fundamental Transaction (as defined below) which

Table of Contents

has not been abandoned, terminated or consummated, or (ii) an Event of Default or (iii) an event that with the passage of time or giving of notice would constitute an Event of Default, unless cured or waived by each holder;

we shall have no knowledge of any fact that would cause any shares of common stock issuable upon conversion of the Notes or as interest and shares of common stock issuable upon exercise of the Warrants not to be eligible for sale without the need for registration under any applicable federal or state securities laws, other than any restrictions imposed on the holder by virtue of its status as our affiliate; and

we otherwise shall have been in material compliance with and shall not have materially breached any provision, covenant, representation or warranty of any transaction document executed in connection with this offering.

Maturity Date

The maturity date of the Notes is August 27, 2010 (Stated Maturity), which may be extended at the option of each holder (i) during the continuance of an Event of Default at Stated Maturity or the occurrence of any event that has occurred and be continuing that with the passage of time and the failure to cure would result in an Event of Default; (ii) for ten (10) business days after consummation of a Change of Control (as defined below in *Redemption Upon Change of Control*), if a Change of Control is publicly announced or a notice for such event is delivered prior to the Stated Maturity; or (iii) until August 27, 2012 in the event we cannot effect a mandatory conversion (as described below) due to the beneficial ownership limitation on such holder.

Letter of Credit

We have entered into a securities purchase agreement with the purchasers, pursuant to which we will obtain a letter of credit from Wells Fargo Bank in the amount of \$7.0 million. The letter of credit will be issued in favor of Portside Growth and Opportunity Fund, who will act as the letter of credit agent, or the LC Agent, and will hold the letter of credit for the benefit of holders of the Notes. Prior to the termination of the letter of credit, the LC Agent will be entitled to draw the letter of credit upon (i) occurrence and during the continuance of an Event of Default or (ii) the Stated Maturity. If any draw is made by the LC Agent under the letter of credit, then within two business days the redemption price under the Notes or any amount due on the Stated Maturity will be reduced by an amount equal to the holder's pro rata portion of the total draw amount. We shall provide the Trustee prompt notice of any draw down of the Letter of Credit, with a copy to each holder, on a pro rata basis, of each holder.

With respect to each holder of Notes that has delivered a redemption notice upon an Event of Default pursuant to the Indenture (with a copy to the LC Agent), no later than the later of (i) the applicable redemption date for the Event of Default under the Indenture and (ii) the second (2nd) business day following the date that the LC Agent received all or any portion of the proceeds from the draw, the LC Agent shall distribute to such holder of Notes an amount in cash equal to the lesser of (i) such holder's Event of Default Redemption Price (as defined below) and (ii) an amount calculated by multiplying \$7.0 million by the quotient determined by dividing (A) the outstanding principal amount of Notes held by such holder by (B) the outstanding principal amount of all Notes.

We are required within one business day of closing to deposit \$7.3 million of the total \$20.0 million proceeds from the offering in a cash collateral account with Wells Fargo Bank to secure our reimbursement obligations in respect of the letter of credit. The funds in the cash collateral account will be released to us upon the termination of the letter of credit. The letter of credit will terminate if we meet certain conditions, which include, but are not limited to, the following: (i) the closing sales price of our common stock on the NASDAQ Global Market equal to or exceeds \$1.524 per share for 20 out of 30 consecutive trading days; (ii) there is no event of default under the Indenture; and (iii) our common stock has not been suspended for trading on NASDAQ. The Notes are not secured by any of our assets or assets of our subsidiaries.

Table of Contents

Conversion

Conversion Rights

At any time or times on or after the issuance date of the Notes, the holder will be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) into shares of our common stock at any time prior to the close of business on the business day immediately preceding the Stated Maturity. We will not issue any fraction of a share of common stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of common stock, we shall round such fraction of a share of common stock up to the nearest whole share. If a holder converts the Notes, we will pay any documentary, stamp or similar issue or transfer tax due on the issuance of shares of common stock upon such conversion. However, the holder will pay any such tax which is due because the holder requests the shares to be issued in a name other than the holder's name.

The number of shares of common stock issuable upon conversion of any Conversion Amount will be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (as defined below) (the Conversion Rate).

Conversion Amount means the sum of (A) the portion of the principal amount of the Note to be converted or redeemed, (B) accrued and unpaid interest with respect to such principal amount and (C) accrued and unpaid late charges with respect to such principal and interest and (D) the applicable Present Value of Interest (as defined below) in connection with (i) a holder's optional conversion, (ii) our exercise of a Mandatory Conversion (see *Mandatory Conversion* below), (iii) a Holder Change of Control Redemption (as defined below) or (iv) a Company Change of Control Redemption (as defined below).

Conversion Price means, as of any conversion date or other date of determination, \$1.27, subject to adjustment provided in the Indenture.

Present Value of Interest means the amount of any interest that, but for (i) a holder's optional conversion, (ii) our Mandatory Conversion, (iii) a Holder Change of Control Redemption or (iv) a Company Change of Control Redemption, as applicable, would have accrued under the Notes at the interest rate for the period from the applicable conversion date, or redemption date, as the case may be, through the maturity date of the Notes discounted to the present value of such interest using a discount rate equal to six and one-quarter percent (6.25%).

To convert a Note or any portion of the Note on any date, a holder must: (i) deliver to the conversion agent, which initially will be Bank of New York, and the conversion agent shall have received, on or prior to 5:00 p.m., New York City time, on such date, a copy of an executed conversion notice, (ii) surrender the Notes to be converted to the conversion agent, as soon as practicable on or following such date, (iii) furnish appropriate endorsements and transfer documents if required by a registrar or a conversion agent and (iv) pay any transfer or similar tax, if required. We shall, as soon as practicable, but in no event later than two (2) trading days following the delivery of a holder's conversion notice, execute and deliver, to the address as specified in the conversion notice, a certificate, registered in the name of the converting holder or its designee, for the number of shares of common stock to which such holder shall be entitled. Upon conversion in full of a Note, such person shall no longer be considered a holder of the Note.

If within three (3) trading days after our receipt of the conversion notice sent by a holder, we fail to issue and deliver a certificate to the holder for the number of shares of common stock to which the holder is entitled upon such holder's conversion of any Conversion Amount (a Conversion Failure), and if on or after such trading day the holder purchases (in an open market transaction or otherwise) common stock to deliver in satisfaction of a sale by the holder of common stock issuable upon such conversion that the holder anticipated receiving from us, then we shall, within three business days after the holder's request and in the holder's discretion, either (i) pay cash to the holder in an amount equal to the holder's total purchase price (including

Table of Contents

brokerage commissions, if any) for the shares of common stock so purchased (the Buy-In Price), at which point our obligation to deliver such certificate (and to issue such common stock) will terminate, or (ii) promptly honor our obligation to deliver to the holder a certificate or certificates representing such common stock and pay cash to the holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of common stock, times (B) the closing bid price of the common stock on the date of conversion.

Mandatory Conversion

We may, at our option, automatically convert all or a portion of the Notes (a Mandatory Conversion) from and at any time after the 24-month anniversary of the issuance date of the Notes (the Mandatory Conversion Eligibility Date) into shares of our common stock at the Conversion Rate as of the Mandatory Conversion Date (as defined below) with respect to the Conversion Amount if (i) the closing sale price of our common stock on the NASDAQ Global Market equals or exceeds, for each of any 20 out of 30 consecutive trading days following the Mandatory Conversion Eligibility Date (the Mandatory Conversion Measuring Period), \$2.2225 per share (as adjusted for any stock splits, stock dividends, recapitalizations, combinations, reverse stock splits or other similar events, including any occurring during such Mandatory Conversion Measuring Period) and (ii) there shall not have been any Equity Conditions Failure. We may exercise our right to require conversion by delivering within three trading days following the end of Mandatory Conversion Measuring Period a written notice to the holders of Notes and the Trustee (the Mandatory Conversion Notice and the business day immediately following the date we send out the Mandatory Conversion Notice to all recipients is referred to as the Mandatory Conversion Notice Date). The Mandatory Conversion Notice shall state (1) the trading day selected for the Mandatory Conversion, which shall be at least 20 trading days but not more than 60 trading days following the Mandatory Conversion Notice Date (the Mandatory Conversion Date), (2) the aggregate Conversion Amount of the Notes subject to mandatory conversion from all of the holders of the Notes and (3) the number of shares of common stock to be issued to the holders on the Mandatory Conversion Date. All Conversion Amounts converted by the holder after the Mandatory Conversion Notice Date will reduce the Conversion Amount of the Notes required to be converted on the Mandatory Conversion Date. If we cannot effect a Mandatory Conversion, in whole or in part, of the Conversion Amount of the Notes (such portion, the Unconverted Amount) as contemplated in any Mandatory Conversion Notice due to the limitations on conversion described in the section entitled *Limitations on Conversion* below, then, as of the applicable Mandatory Conversion Date, (w) interest on such Unconverted Amount shall cease to accrue, (x) the holders will have no right to require an Event of Default Redemption with respect to such Unconverted Amount for certain Events of Default, (y) the holders will not be entitled to receive the 20% premium in any Change of Control Redemption Price paid by us with respect to such Unconverted Amount and (z) such Unconverted Amount will be converted on the date such conversion is permitted under the limitations of conversion.

Limitations on Conversion

We will not effect any conversion of the Notes, and the holders of the Notes will not have the right to convert any portion of the Notes, to the extent that after giving effect to such conversion, the holder (together with the holder's affiliates) would beneficially own in excess of 4.99% (the Maximum Percentage) of the number of shares of common stock outstanding immediately after giving effect to such conversion. Beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. By written notice to us, the holder may increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99%; provided that (i) any such increase will not be effective until the 61st day after such notice is delivered to us, and (ii) any such increase or decrease will apply only to the notifying holder and not to any other holder of Notes.

We will not be obligated to issue any shares of common stock upon conversion of the Notes, and the holders of the Notes shall not have the right to receive upon conversion of the Notes any shares of common stock, if the issuance of such shares of common stock would exceed the aggregate number of shares of common stock which we may issue upon conversion or exercise, as applicable, of the Notes and the Warrants without breaching our obligations under the rules or regulations of the NASDAQ Global Market, except that such limitation shall not

Table of Contents

apply in the event that we (A) obtain the approval of our stockholders as required by the applicable rules of the NASDAQ Global Market for issuances of common stock in excess of such amount or (B) obtain a written opinion from our outside counsel that such approval is not required, which opinion shall be reasonably satisfactory to the holders.

Redemption

Except for our right to redeem all outstanding Notes upon a Change of Control as described below, the Notes are not redeemable at our option at any time prior to Stated Maturity.

Redemption Upon Event of Default

Upon the occurrence of an Event of Default (defined below) with respect to the Notes, we shall within one business day deliver written notice in the form of an officer's certificate to each holder of the Notes. At any time after the earlier of the holders' receipt of such notice and the holders becoming aware of an Event of Default, each holder may require us to redeem all or any portion of such holder's Notes by delivering written notice thereof (the Event of Default Redemption Notice) to us, which shall indicate the portion of the Notes the holders are electing to redeem. Each portion of the Notes subject to redemption shall be redeemed by us at a price equal to the greater of (i) the product of (x) the Conversion Amount to be redeemed and (y) the applicable redemption premium (120%) and (ii) the product of (A) the Conversion Amount to be redeemed divided by the Conversion Price in effect at such time as the holder delivers an Event of Default Redemption Notice and (B) the greater of (1) the closing sale price of the common stock on the date immediately preceding such Event of Default, (2) the closing sale price of the common stock on the date immediately after such Event of Default and (3) the closing sale price of the common stock on the date the holder delivers the Event of Default Redemption Notice (the Event of Default Redemption Price).

Each of the following events constitutes an Event of Default under the Notes:

the suspension from trading or failure of our common stock to be listed on a stock exchange for a period of ten (10) consecutive trading days or for more than an aggregate of twenty (20) trading days in any 365-day period;

our failure to cure a Conversion Failure within ten (10) business days after the applicable date of conversion or our notice to any holder of the Notes of our intention not to comply with a request for conversion of any Note;

at any time following the tenth (10th) consecutive business day that the number of authorized shares of common stock under our charter allocated the holder is less than the number of shares of common stock that such holder would be entitled to receive upon a conversion of the full Conversion Amount of the Note;

our failure to pay to a holder any amount of principal (including, without limitation, any redemption payments) or other amounts payable under the transaction documents for this offering, when and as due, or our failure to pay cash interest or late charges within five (5) business days after notice of such failure;

we either (i) fail to pay when due, or within any applicable grace period, any third party indebtedness in excess of \$250,000 in the aggregate, subject to certain exceptions, or otherwise be in breach or violation of any agreement for monies owed or owing in respect of any indebtedness in an amount in excess of \$250,000 in the aggregate, which breach or violation permits the other party to declare a default or otherwise accelerate amounts due, or (ii) suffer to exist an event of default under any agreement binding on us, which event of default has resulted or likely would result in a material adverse effect on our or our subsidiary's business, operations, properties or financial conditions;

occurrence of certain events of bankruptcy, insolvency, or reorganization involving us or any of our subsidiaries;

Table of Contents

issuance of court judgments for payment of money in excess of \$500,000 are rendered against us or any of our subsidiaries that are not stayed or discharged within 60 days;

we breach any covenant or other terms of any transaction document in the offering and any such breach continues for ten (10) days; or

any breach or failure to comply with certain other covenants included in the Indenture, including covenants as to incurrence of debt or liens, restricted payments, distribution of cash dividend and reservation of authorized shares.

Redemption Upon Change of Control

No sooner than fifteen (15) days nor later than ten (10) days prior to the consummation of a Change of Control (as defined below), but not prior to the public announcement of such Change of Control, we will deliver written notice to the holders of the Notes and the Trustee setting forth certain information relating to the Change of Control. At any time during the period beginning on the date of the holders' receipt of such notice and ending twenty (20) trading days after the consummation of such Change of Control, the holders may require us to redeem (a *Holder Change of Control Redemption*) all or any portion of the Notes by delivering written notice to us, which notice shall indicate the portion of the principal of the Notes such holder is electing to redeem. The portion of the Notes subject to redemption shall be redeemed by us in cash at a price equal to the sum of (1) accrued and unpaid interest and late charges and (2) the greater of (i) the product of (x) the Conversion Amount (excluding interest and late charges) being redeemed and (y) the quotient determined by dividing (A) the greater of the closing sale price of our common stock immediately prior to the consummation of the Change of Control, the closing sale price immediately following the public announcement of such proposed Change of Control and the closing sale price of the common stock immediately prior to the public announcement of such proposed Change of Control by (B) the Conversion Price and (ii) 120% of the Conversion Amount (excluding interest and late charges) being redeemed (the *Holder Change of Control Redemption*).

In the event of a Change of Control, we have the right to redeem, in whole and not in part, the Notes (a *Company Change of Control Redemption*), at a price equal to the sum of (1) accrued and unpaid interest and late charges and (2) the greater of (i) the product of (x) the Conversion Amount (excluding interest and late charges) being redeemed and (y) the quotient determined by dividing (A) the greater of the closing sale price of our common stock immediately prior to the consummation of the Change of Control, the closing sale price immediately following the public announcement of such proposed Change of Control and the closing sale price of the common stock immediately prior to the public announcement of such proposed Change of Control by (B) the Conversion Price and (ii) 140% (if the acquirer is a publicly traded company) or 120% (if the acquirer is not a publicly traded company) of the Conversion Amount (excluding interest and late charges) being redeemed (the *Company Change of Control Redemption Price*). To redeem the Notes in a Change of Control, we shall provide a notice to the holders stating (i) that, following the consummation of the Change of Control, we shall redeem all of the outstanding Notes on the *Company Change of Control Redemption Date* (as defined below), (ii) that we shall consummate the redemption on the twentieth (20th) day following the consummation of such Change of Control (the *Company Change of Control Redemption Date*), (iii) the aggregate outstanding Conversion Amount of the Notes subject to redemption from all the holders of the Notes and (iv) the *Company Change of Control Redemption Price* to be paid to such holder on the *Company Change of Control Redemption Date* (the *Company Change in Control Redemption*). Each holder of the Notes has the right to exercise its right of optional conversion at any time until the *Company Change of Control Redemption Price* has been paid.

A *Change of Control* is any *Fundamental Transaction* as described below other than (i) a *Fundamental Transaction* in which holders of our voting power after such *Fundamental Transaction* continue to hold publicly traded securities and the voting power of the successor entity necessary to elect a majority of the member of the board of directors of such entity; or (ii) a merger solely for the purpose of changing our jurisdiction of incorporation.

Table of Contents

A Fundamental Transaction occurs when we

consolidate or merge with or into (whether or not we are the surviving corporation) another person or persons, if the holders of the common stock (not including any shares of common stock held by the person or persons making or party to, or associated or affiliated with the persons making or party to, such consolidation or merger) immediately prior to such consolidation or merger shall hold or have the right to direct the voting of less than 50% of the voting stock or such voting securities of such other surviving person immediately following such transaction;

sell, assign, transfer, convey or otherwise dispose of all or substantially all of our properties or assets;

allow another person to make a purchase, tender or exchange offer that is accepted by the holders of more than the 50% of the outstanding shares of voting stock (not including any shares of common stock held by the person or persons making or party to, or associated or affiliated with the persons making or party to, such purchase, tender or exchange offer);

consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another person whereby such other person acquires more than the 50% of the outstanding shares of voting stock (not including any shares of common stock held by the other person or other persons making or party to, or associated or affiliated with the other persons making or party to, such stock purchase agreement or other business combination);

reorganize, recapitalize or reclassify our common stock; or

have any person or group become the beneficial owner (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% of the aggregate ordinary voting power represented by our issued and outstanding common stock.

Procedure Upon Redemption

The redemption price of the Notes to be redeemed pursuant to the above provisions shall be paid in cash. We shall deposit cash at the time and in the manner as provided in the Indenture, sufficient to pay the aggregate Event of Default Redemption Price or Change of Control Redemption Price, as applicable, of all Notes to be purchased pursuant to such redemption. Any physical Note which is to be redeemed, whether in whole or in part, must be surrendered at the office of the paying agent (with, if we or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to us and the Trustee duly executed by, the holder thereof or such holder's attorney duly authorized in writing) and we shall execute and the Trustee shall authenticate and deliver to the holder of such Note, without service charge, a new Note or Notes, of any authorized denomination as requested by such holder in aggregate principal amount equal to, and in exchange for, the portion of the principal amount of the Notes so surrendered which is not redeemed.

Fundamental Transactions

If we enter into or are a party to a Fundamental Transaction in which we are the successor entity, we will (i) affirm our obligations under the Indenture, the Notes and other transaction documents in the offering and (ii) confirm that there shall be issuable upon conversion of the Notes at any time after the consummation of the Fundamental Transaction, (A) our common stock or such other shares of publicly traded common stock (or their equivalent), or our common stock as the successor entity or (B) if we are not a publicly traded entity following such Fundamental Transaction, in lieu of the shares of the our common stock (or other securities, cash, assets or other property) issuable upon the conversion of the Notes, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the holders would have been entitled to receive upon the happening of such Fundamental Transaction had the Notes been converted immediately prior to such Fundamental Transaction, in each case as adjusted in accordance with the provisions of the Indenture.

Table of Contents

Adjustments of Conversion Price; Anti-Dilution Protections

If through the eighteen (18) month anniversary of the issuance date of the Notes, we issue or sell any shares of our common stock (except for certain issuances of securities such as stocks and options under employee benefit plans) for a consideration per share (the New Issuance Price) less than a price (the Applicable Price) equal to the Conversion Price in effect immediately prior to such issue or sale (the foregoing a Dilutive Issuance), then immediately after such issuance or sale, the Conversion Price then in effect shall be reduced to an amount equal to the New Issuance Price.

If on or after the eighteen (18) month anniversary of the issuance date of the Notes, we issue or sell any shares of common stock (except for certain issuances of securities such as stocks and options under employee benefit plans) in a Dilutive Issuance, then immediately after such Dilutive Issuance, the Conversion Price then in effect will be reduced to an amount equal the product of (A) the Conversion Price in effect immediately prior to such Dilutive Issuance and (B) the quotient determined by dividing (1) the sum of (I) the product derived by multiplying the Conversion Price in effect immediately prior to such Dilutive Issuance and the number of shares of common stock deemed outstanding immediately prior to such Dilutive Issuance plus (II) the consideration, if any, received by us upon such Dilutive Issuance, by (2) the product derived by multiplying (I) the Applicable Price in effect immediately prior to such Dilutive Issuance by (II) the number of shares of common stock deemed outstanding immediately after such Dilutive Issuance. For purposes of determining the adjusted Conversion Price, the following will be applicable:

If we grant or sell any options or warrant and the lowest price per share for which one share of common stock is issuable upon the exercise of any such option or warrant or upon conversion or exchange or exercise of any convertible securities issuable upon exercise of such option or warrant is less than the Applicable Price, then such share of common stock will be deemed to be outstanding and to have been issued and sold by us at the time of the granting or sale of such option for such price per share.

If we issue or sell any convertible securities and the lowest price per share for which one share of common stock is issuable upon such conversion or exchange or exercise is less than the Applicable Price, then such share of common stock shall be deemed to be outstanding and to have been issued and sold by us at the time of the issuance or sale of such convertible securities for such price per share.

If the purchase price provided for in any options, the additional consideration, if any, payable upon the issue, conversion, exchange or exercise of any convertible securities, or the rate at which any convertible securities are convertible into or exchangeable or exercisable for common stock changes at any time, the Conversion Price in effect at the time of such change shall be adjusted to the Conversion Price which would have been in effect at such time had such options or convertible securities provided for such changed purchase price, additional consideration or changed conversion rate, as the case may be, at the time initially granted, issued or sold. If the terms of any option or convertible security that was outstanding as of the subscription date for the Notes are changed in the manner described in the immediately preceding sentence, then such option or convertible security and the common stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such change. No adjustment shall be made if such adjustment would result in an increase of the Conversion Price then in effect.

In case any option is issued in connection with the issue or sale of other of our securities, together comprising one integrated transaction in which no specific consideration is allocated to such options by, the options will be deemed to have been issued for a consideration of \$.01. If any common stock, options or convertible securities are issued or sold or deemed to have been issued or sold for cash, the consideration received will be deemed to be the net amount received by us. If any common stock, options or convertible securities are issued or sold for a consideration other than cash, the amount of the consideration other than cash received by us will be the fair value of such consideration, except where such consideration consists of securities, in which case the amount of consideration received by us will be the closing sale price of such securities on the date of receipt. If any common stock, options

Table of Contents

or convertible securities are issued to the stockholders of the non-surviving entity in connection with any merger in which we are the surviving entity, the amount of consideration will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such common stock, options or convertible securities, as the case may be.

If we take a record of the holders of common stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in common stock, options or in convertible securities or (B) to subscribe for or purchase common stock, options or convertible securities, then such record date will be deemed to be the date of the issue or sale of the common stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

The anti-dilution adjustment described above is subject to a floor, such that no adjustment will be made if it causes the Conversion Price to be less than \$1.2675 as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction, unless we receive any stockholder approval that may be required under any applicable rules of NASDAQ. Pursuant to a securities purchase agreement with the purchasers of the Notes, we have agreed to solicit stockholder approval for the issuance of the Notes and the Warrants at or prior to our annual stockholders meeting in 2008.

If we at any time on or after the subscription date of the Notes subdivide (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of our outstanding shares of common stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If we at any time on or after the subscription date of the Notes combine (by combination, reverse stock split or otherwise) one or more classes of our outstanding shares of common stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased.

If we issue rights, options or warrants (other than pursuant to a stockholder rights plan) to all or substantially all holders of our common stock entitling them to subscribe for or purchase shares of common stock (or securities convertible into common stock) at a price per share (or having a conversion price per share) less than the closing sale price per share of common stock on the business day immediately prior to the date of announcement of such issuance, the Conversion Price in effect shall be adjusted so that the same shall equal the price determined by multiplying the Conversion Price by a fraction: (1) the numerator of which shall be the number of shares of common stock outstanding on the close of business on the date of announcement, plus the number of shares which the aggregate offering price of the total number of shares so offered for subscription or purchase (or the aggregate conversion or exercise price of the securities so offered) would purchase at such current market price of the common stock, and (2) the denominator of which shall be the number of shares of common stock outstanding at the close of business on the date of announcement, plus the total number of additional shares of common stock so offered for subscription or purchase (or into which the securities so offered are convertible or exercisable). Such adjustment shall be made successively whenever any such rights, options or warrants are issued, and shall become effective on the date following the date of announcement of such issuance. If at the end of the period during which such rights, options or warrants are exercisable and not all rights, options or warrants shall have been exercised, the adjusted Conversion Price shall be immediately readjusted to what it would have been based upon the number of additional shares of common stock actually issued (or the number of shares of common stock issuable upon conversion of convertible securities actually issued).

Without duplicating other adjustments, prior to the consummation of any Fundamental Transaction in which holders of our common stock are entitled to receive securities or other assets with respect to or in exchange for shares of our common stock (a Corporate Event), we will make appropriate provision to insure that holders of the Notes will have the right to receive upon a conversion, in lieu of shares of common stock otherwise receivable, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscriptions rights) which the holders would have been entitled to receive upon the happening of such Corporate Event had the Notes been converted immediately prior to such Corporate Event.

Table of Contents

Notice of Conversion Price Adjustment

Whenever the Conversion Price is adjusted, we shall promptly mail, but in no event later than 3 business days, to each holder of the Notes a notice of the adjustment and file with the Trustee an officers' certificate briefly stating the facts requiring the adjustment and the manner of computing it, which computation shall have been made us.

Covenants

We have agreed to certain customary covenants in the Indenture, including limitations on us and our subsidiaries to:

incur indebtedness except for certain permitted indebtedness;

incur liens except for certain permitted liens;

incur liens related to our intellectual property, subject to certain permitted liens, including licenses and sublicenses granted by us in the ordinary course of our business;

make restricted payments in respect of other indebtedness; and

redeem, repurchase or declare or pay any cash dividend or distribution on our capital stock.

Reservation of Authorized Shares of Common Stock

We have agreed to initially reserve out of our authorized and unissued common stock a number of shares of common stock for each of the Notes equal to 120% of the Conversion Rate (as defined above) with respect to the Conversion Amount of each such Note as of the issuance date of the Notes. So long as any of the Notes are outstanding, we will take all action necessary to reserve our authorized and unissued common stock, solely for the purpose of effecting the conversion of the Notes, 120% of the number of shares of common stock as shall from time to time be necessary to effect the conversion of all of the Notes then outstanding. The initial number of shares of common stock reserved for conversions of the Notes and each increase in the number of shares so reserved will be allocated pro rata among the holders of the Notes based on the principal amount of the Notes held by each holder or increase in the number of reserved shares, as the case may be (the Authorized Share Allocation). In the event that a holder sells or otherwise transfers any of the Notes, each transferee will be allocated a pro rata portion of such holder's Authorized Share Allocation.

Voting Rights

The holders of the Notes shall have no voting rights as the holders of the Notes, except as required by law.

Modification and Amendment

We may enter into one or more supplemental indentures to amend the Notes, in form satisfactory to the Trustee, without the consent of any of the holders of the Notes, for any of the following purposes:

to evidence the succession of another person to us and the assumption by any such successor of the covenants in the Indenture;

to add to the covenants for the benefit of the holders, or to surrender any right or power conferred upon us;

to provide for a successor Trustee;

to cure any ambiguity or defect, to correct or supplement any provision in the Indenture which may be inconsistent with any other provision, provided that it will not adversely affect the interest of the holders;

S-25

Table of Contents

to add any additional Events of Default for the benefit of the holders;

to convey, transfer, assign, mortgage or pledge to the Trustee as security for the Notes any property or assets;

to decrease the Conversion Price in accordance with the terms of the Indenture, if such decrease does not adversely affect the interest of the holders;

to supplement any provision of the Indenture to the extent necessary to permit or facilitate the discharge of the Notes; provided that such change or modification does not adversely affect the interests of the holders;

to make any change or modification necessary in connection with the registration of the Notes under the Securities Act as contemplated in a registration rights agreement; or

to add or modify any other provision of the Indenture we and the Trustee may deem necessary or desirable and which would not reasonably be expected to adversely affect the interests of the holders.

With the consent of holders representing a majority of outstanding principal amount of the Notes, we and the Trustee may enter into one or more supplemental indentures for the purposes of adding, changing or eliminating any provision in the Indenture, provided however, no supplemental indenture shall, without the consent of each holder of the outstanding Notes affected:

reduce the rate of or extend the time for payment of interest, if any, on the Note;

reduce the principal amount of, or extend the maturity of, any Note;

make any change that impairs or adversely affects the conversion rights of any Note;

reduce any Redemption Price of any Note or amend or modify in any manner adverse to the holders our obligation to make such payments, whether through an amendment or waiver of provisions in the covenants, definitions or otherwise;

modify the provisions of the Indenture in respect of the right of holders to cause us to redeem Notes on the upon a Change of Control in a manner adverse to the holders;

make any interest or principal amount on a Note payable in money other than that stated in the Note or other than in accordance with the provisions of the Indenture;

impair the right of any holder to receive payment of the principal amount of or interest, on a holder's Note on or after the due dates therefor or to institute suit for the enforcement of any payment on or in respect of such holder's Notes;

reduce the quorum or voting requirements under the Indenture;

change the ranking of the Notes in a manner adverse to the holders;

make any change in the amendment provisions which require each holder's consent or in the waiver provisions;

reduce the percentage in principal amount of the outstanding Notes, the consent of whose holders is required for any such supplemental indenture, or the consent of whose holders is required for any waiver provided for in the Indenture;

modify provisions in the Indenture with respect to certain except to provide that the Indenture cannot be modified or waived without the consent of the holder of outstanding Notes;

modify the provisions of the Indenture in a manner adverse to the holders in any material respect;

modify certain limitations on conversion with respect to such holder; or

as otherwise provided in the Indenture.

S-26

Table of Contents

Participation

The holders of the Notes will be entitled to receive such dividends paid and distributions made to the holders of common stock to the same extent as if the holders had converted the Notes into common stock (without regard to any limitations on conversion) and had held such shares of common stock on the record date for such dividends and distributions. Payments under the preceding sentence shall be made concurrently with the dividend or distribution to the holders of common stock.

Ranking

The Notes are our unsecured general obligations ranking equally with our other unsecured indebtedness and ranking senior in right of payment to any future Indebtedness that is expressly subordinated in right of payment to the Notes.

Listing

The Notes are not currently listed on any national securities exchange or quotation system. We do not intend to file an application for such a listing.

Transferability

The Notes may be offered, sold, assigned or transferred by the holder without our consent, subject to certain limited exceptions. If any Note is to be transferred, the holder shall surrender the Note to us, whereupon we will forthwith issue and deliver upon the order of the holder a new Note registered as the holder may request, representing the outstanding principal being transferred by the holder and, if less than the entire outstanding principal is being transferred, a new Note representing the outstanding principal not being transferred.

Discharge

We may satisfy and discharge our obligations under the Indenture when (a) either (i) all Notes authenticated and delivered have been delivered to the Trustee for cancellation; or (ii) all such Notes not theretofore delivered to the Trustee for cancellation have become due and payable and we have deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose an amount sufficient to pay and discharge the entire indebtedness evidenced by such Notes not theretofore delivered to the Trustee for cancellation; (b) we have paid or caused to be paid all other sums payable under the Indenture by us; and (c) we have delivered to the Trustee an officers' certificate and an opinion of counsel, each stating that all conditions precedent for relating to the satisfaction and discharge of this Indenture have been complied with.

Reports

We will be required to file with the Trustee, within 15 days after filing the same with the SEC, copies of our annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may by rules and regulations prescribe) which we file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act. In the event we are at any time no longer subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, we will file all such reports with the Trustee as may be required by the provisions of Section 314(a) of the Trust Indenture Act.

Information Concerning the Trustee

The Bank of New York Trust Company, N.A., as trustee under the Indenture, has been appointed by us as paying agent, conversion agent, registrar, with regard to the Notes. Holders representing a majority of the aggregate principal amount of the Notes outstanding have the right, to direct the time, method and place of

Table of Contents

conducting any proceeding for any remedy available to the trustee or exercising any power conferred on the trustee, provided that the trustee may refuse to follow such direction if it may result in personal liability for which the trustee would not be entitled to indemnification under the Indenture.

Governing Law

The Indenture will be governed by, and construed in accordance with, the laws of the State of New York.

Certificated Securities

The Notes will be issued in certificated form. Unless specified by us, the Notes will not be held in book entry form. You may transfer or exchange certificated Notes with the Registrar's office or paying agencies in accordance with the terms of the Indenture. Each Note may be transferred in whole or in part only by registration of such transfer on the Register held by the Securities Registrar, which shall be the Trustee.

Table of Contents

DESCRIPTION OF WARRANTS

Each of Series A Warrant, Series B Warrant and Series C Warrant (collectively, the Warrants), upon circumstances described in this prospectus supplement, entitles its holder to purchase a specified number of shares of our common stock, subject to the conditions described therein. The following is a summary of certain provisions of the Warrants and does not purport to be complete and is subject to, and is qualified in its entirety by reference to, all the terms and conditions of the Warrants. Copies of the Form of Warrant for each series of the Warrants will be included as exhibits to a Current Report on Form 8-K that we will file with the SEC and that will be incorporated by reference into the registration statement of which this prospectus supplement forms a part.

Exercise of the Warrants

The Series A Warrants are exercisable initially for 6,299,212 shares of our common stock at any time following the date of issuance until the fifth anniversary of the date of issuance, at an initial exercise price of \$1.14 per share.

The Series B Warrants are exercisable only to the extent any Series A Warrants are exercised. The number of shares of common stock issuable upon exercise of Series B Warrants will be equal to the number of shares of common stock issued upon exercise of the holders Series A Warrants. Series B Warrants will have a term of three (3) years beginning on the date on which they become exercisable. The exercise price of those Series B Warrants that become exercisable during any calendar quarter (due to the partial exercise of Series A Warrants during such quarter) will be 110% of the closing sales price of the common stock on the last trading day of such calendar quarter. On the date when all of the Series A Warrants are exercised, then all of Series B Warrants not then exercised will become immediately exercisable at an exercise price equal to 110% of the closing sales price of the common stock on such date. The exercise price of Series B Warrants is subject to a floor, such that it cannot be less than \$1.13 per share (the exercise floor price).

The Series C Warrants are exercisable initially for 4,724,409 shares of our common stock at any time following the date of issuance until the fifth anniversary of the date of issuance, at an initial exercise price of \$1.14 per share.

The Warrants may be exercised by completing and signing the appropriate form of exercise notice attached to the Warrant and mailing or delivering the exercise notice to us by the expiration date of the respective series of Warrant, accompanied by payment of the aggregate exercise price. Payment of the exercise price must be made in cash or wire transfer of immediately available funds to the order of us. Alternatively, if a registration statement covering the issuance of the shares of common stock underlying the Warrants is not available for the issuance of such shares of common stock, then during the time period in which such a registration statement is not available, such holder may exercise the Warrant, in whole or in part, by means of a customary cashless exercise provision.

If we fail to issue to the holder within five business days of receipt of the exercise delivery documents (which includes a exercise notice and proof of payment) a certificate for the number of shares of common stock to which a holder is entitled and register such shares of common stock on our share register, then, in addition to all other remedies available to the holder, we will pay in cash to the holder on each day after such fifth business day that the issuance of such shares of common stock is not timely effected an amount equal to 1.0% of the product of (A) the sum of the number of shares of common stock not issued to the holder on a timely basis and to which the holder is entitled and (B) the weighted average price of the shares of common stock on the trading day immediately preceding the last possible date which we could have issued such shares of common stock to the holder. In addition to the foregoing, if within three trading days after our receipt of the facsimile copy of an exercise delivery document we fail to issue and deliver a certificate to the holder and register such shares of common stock on the share register, and if on or after such trading day the holder purchases (in an open market transaction or otherwise) shares of common stock to deliver in satisfaction of a sale by the holder of shares of

Table of Contents

common stock issuable upon such exercise that the holder anticipated receiving from us, then we shall, within five business days after the holder's request and in the holder's discretion, either (i) pay cash to the holder in an amount equal to the holder's total purchase price (including brokerage commissions, if any) for the shares of common stock so purchased (the Buy-In Price), at which point our obligation to deliver such certificate (and to issue such shares) shall terminate, or (ii) promptly honor our obligation to deliver to the holder a certificate or certificates representing such shares and pay cash to the holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of common stock, times (B) the weighted average price on the date of exercise.

Limitations on Exercise

We will not effect any exercise of the Warrants, and the holders of the Warrants shall not have the right to exercise any portion of the Warrants, to the extent that after giving effect to such conversion, the holder (together with the holder's affiliates) would beneficially own in excess of 4.99% (the Maximum Percentage) of the number of shares of common stock outstanding immediately after giving effect to such exercise. Beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. In determining the number of outstanding shares of common stock, the holder may rely on the number of outstanding shares of common stock as reflected in (x) our most recent Form 10-K, Form 10-Q or Form 8-K, as the case may be, (y) a more recent public announcement by us or (z) any other notice by us or the transfer agent setting forth the number of shares of common stock outstanding. By written notice to us, the holder may increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% specified in such notice; provided that (i) any such increase will not be effective until the 61st day after such notice is delivered to us, and (ii) any such increase or decrease will apply only to the notifying holder and not to any other holder of Warrants.

We will not be obligated to issue any shares of common stock upon exercise of the Warrants, and the holders of the Warrants do not have the right to receive upon exercise of the Warrants any shares of common stock, if the issuance of such shares of common stock would exceed the aggregate number of shares of common stock which we may issue upon conversion or exercise, as applicable, of the Notes and the Warrants without breaching our obligations under the rules or regulations of the NASDAQ Global Market, except that such limitation shall not apply in the event that we (A) obtain the approval of our stockholders as required by the applicable rules of the NASDAQ Global Market for issuances of common stock in excess of such amount or (B) obtained a written opinion from our outside counsel that such approval is not required, which opinion shall be reasonably satisfactory to the holders.

Mandatory Exercise Rights

At any time after the letter of credit is terminated, we have the right to require holders to exercise Series A Warrants by sending a notice to such holders, if all of the following conditions are satisfied:

at any time during any thirty (30) consecutive trading days, the closing sales price of our common stock equals or exceeds 135% of the exercise price of Series A Warrants in effect on the issuance date (as adjusted for stock splits, stock dividends and similar events) for twenty (20) trading days;

the shares of common stock issuable upon exercise of Series A Warrants (the warrant A shares) are freely tradable without restriction other than restrictions related to holder's affiliate status with respect to us;

the warrant A shares are designated for listing on NASDAQ Global Market and have not been suspended from trading;

we have delivered unrestricted warrant A shares to holders upon exercise of Series A Warrants on a timely basis;

Table of Contents

after the date of notice, any applicable shares of common stock issuable upon exercise of Series A Warrants may be issued in full without violating the limitations on exercise as set forth above; and

we have been in material compliance with and shall not have materially breached any provision, covenant, representation or warranty of any transaction documents in the offering.

In addition, at any time after the later of (i) six month anniversary of the issuance date of Series C Warrants; (ii) thirty (30) days after the date when all Series A Warrants are exercised; and (iii) thirty (30) days after the letter of credit is terminated, we have the right to require holders to exercise Series C Warrants by sending a notice to such holders, if the following conditions are satisfied:

at any time during any thirty (30) consecutive trading days, the closing sales price of our common stock equals or exceeds 125% of the exercise price of Series C Warrants in effect on the issuance date (as adjusted for stock splits, stock dividends and similar events) for twenty (20) trading days;

the shares of common stock issuable upon exercise of Series C Warrants (the warrant C shares) are freely tradable without restriction other than restrictions related to holder s affiliate status with respect to us;

the warrant C shares are designated for listing on NASDAQ Global Market and shall have not been suspended from trading;

we have delivered unrestricted warrant C shares to holders upon exercise of Series C Warrants on a timely basis;

after the date of the notice, any applicable shares of common stock issuable upon exercise of Series C Warrants may be issued in full without violating the limitations on exercise as set forth above; and

we have been in material compliance with and shall not have materially breached any provision, covenant, representation or warranty of any transaction documents in the offering.

Reservation of Common Stock

If at any time while the Warrants remain outstanding we do not have a sufficient number of authorized and unreserved shares of common stock to satisfy our obligation to reserve for issuance upon exercise of the Warrants at least a number of shares of common stock equal to 120% (the Required Reserve Amount) of the number of shares of common stock as may from time to time be necessary to effect the exercise of all of the Warrants then outstanding, then we shall immediately take all action necessary to increase our authorized shares of common stock to an amount sufficient to allow us to reserve the Required Reserve Amount for the Warrants then outstanding.

Adjustments of Exercise Price; Anti-Dilution Protections

The Warrants contain nearly identical provisions to those included in the Indenture regarding adjustments to the exercise/conversion price and anti-dilution protections. No adjustment will be made if such adjustment will cause the exercise price of the Warrants to be less than the fixed floor price. See the section entitled *Adjustments of Conversion Price; Anti-Dilution Protections* under the heading *Description of Notes*.

Dividends and Distributions

If we declare or make any dividend or other distribution of our assets (or rights to acquire our assets) to holders of our common stock at any time after the issuance of the Warrants, then, in each such case, the exercise price of the Warrants will be adjusted to take into effect such dividend or distribution, provided that such adjustment cannot cause the exercise price to be less than the exercise floor price.

Table of Contents

Rights upon the Issuance of Purchase Rights

If at any time we grant, issue or sell any options, convertible securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of common stock (the Purchase Rights), then the holders of the Warrants will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the holders could have acquired if the holders had held the number of shares of common stock acquirable upon complete exercise of the Warrants (without taking into account any limitations or restrictions on the exercise of the Warrants) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of common stock are to be determined for the grant, issue or sale of such Purchase Rights.

Fundamental Transactions

If we enter into or are a party to a Fundamental Transaction (as defined above) in which we are the successor entity, we shall deliver to the holders of Warrants (i) an affirmation that the Warrants shall be a continuing obligation, and a reaffirmation of the obligations under the documents executed in connection with the offering of the Notes and the Warrants following such Fundamental Transaction and (ii) a confirmation that there shall be issued upon exercise of the Warrants at any time after the consummation of the Fundamental Transaction, (A) our common stock or such other shares of publicly traded common stock (or their equivalent), or our common stock as the successor entity or (B) if we are not a publicly traded entity following such Fundamental Transaction, in lieu of the shares of the our common stock (or other securities, cash, assets or other property) issuable upon the exercise of the Warrants prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the holders would have been entitled to receive upon the happening of such Fundamental Transaction had the Warrants been exercised immediately prior to such Fundamental Transaction, in each case as adjusted in accordance with the provisions of the Warrants.

At any time during the period beginning on the date of the holders' receipt of notice of a Fundamental Transaction and ending on the thirtieth day (the Automatic Exchange Date) after the close of the Fundamental Transaction, a holder may require us to exchange the Warrant (a Fundamental Transaction Exchange), within ten business days after such request (or, if later, on the closing date of the Fundamental Transaction), in lieu of the shares of the common stock (or other securities, cash, assets or other property) issuable upon the exercise of the Warrant prior to such Fundamental Transaction, for such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the holder would have been entitled to receive upon the happening of such Fundamental Transaction had the warrant been exercised immediately prior to such Fundamental Transaction. If the Fundamental Transaction Exchange has not occurred prior to the Automatic Exchange Date and the holder has not delivered a Black-Scholes Notice (as defined below) prior to the Automatic Exchange Date, the Fundamental Transaction Exchange automatically shall occur on the Automatic Exchange Date.

Notwithstanding the foregoing, in the event of a Fundamental Transaction, at the request of the holder delivered before the Automatic Exchange Date (a Black-Scholes Notice), we (or the successor entity) shall purchase the Warrants from the holders by paying to the holders, within ten business days after such request (or, if later, on the effective date of the Fundamental Transaction), cash in an amount equal to the Black-Scholes Value of the remaining unexercised portion of the Warrant on the date of such Fundamental Transaction.

Voting

A holder of the Warrants, solely in such person's capacity as a holder of the Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital for any purpose, nor shall anything contained in the Warrants be construed to confer upon the holder any of the rights of our stockholders or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of

Table of Contents

stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the holder of the shares which such person is then entitled to receive upon the due exercise of the Warrant.

Governing Law

The Indenture will be governed by, and construed in accordance with, the laws of the State of New York.

Listing

The Warrants are not currently listed on any national securities exchange or quotation system. We do not intend to file an application for such a listing.

Transferability

If the Warrants are to be transferred, the holder must surrender the Warrant to us, and we will issue and deliver to the holder a new Warrant registered as the holder may request, representing the right to purchase the number of shares being transferred by the holder and, if less than the total number of shares then underlying the Warrant is being transferred, a new Warrant to the holder representing the right to purchase the number of shares not being transferred. The Warrants may be offered for sale, sold, transferred or assigned in accordance with applicable law without our consent.

Table of Contents

CERTAIN U.S. FEDERAL TAX CONSIDERATIONS

The following is a general discussion of certain U.S. federal income tax considerations relevant to holders of Notes or Warrants or our common stock acquired in connection with the Notes or Warrants. This discussion is based upon the Internal Revenue Code of 1986, as amended, which we refer to as the Code in this prospectus supplement, U.S. Treasury Regulations, Internal Revenue Service (IRS) rulings and pronouncements, and judicial decisions, all as of the date of this prospectus, and all of which are subject to change (possibly with retroactive effect) or different interpretations. There can be no assurance that the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling from the IRS with respect to any matters discussed in this section.

This discussion does not address tax considerations that may be relevant to particular investors because of their specific circumstances or because they are subject to special rules, such as persons subject to the alternative minimum tax provisions of the Code, holders whose functional currency is not the U.S. dollar, dealers in securities or currencies, traders in securities that elect to use a mark-to-market method of accounting, banks, thrifts, regulated investment companies, insurance companies, pension and other employee benefit plans, tax-exempt organizations and entities, partnerships and other pass-through entities, certain hybrid entities and owners of interests therein, persons who acquire Notes or Warrants in connection with the performance of services, persons holding Notes, Warrants or our common stock as part of a hedging or conversion transaction or a straddle, or persons deemed to sell Notes, Warrants or our common stock under the constructive sale provisions of the Code. The discussion also, except as explicitly noted herein, does not discuss any aspect of state, local or foreign law or U.S. federal tax laws other than U.S. federal income tax law. In addition, this discussion is limited to holders who acquire their Notes and Warrants in the offering described herein and who will hold the Notes, Warrants and our common stock as capital assets within the meaning of Section 1221 of the Code (generally, for investment). This summary also assumes that the IRS and the courts will respect the classification of the Notes as indebtedness for U.S. federal income tax purposes. No assurance can be given, however, that the classification of the Notes as indebtedness will not be challenged by the IRS, or if challenged, that such a challenge will not be successful.

All prospective purchasers of the Notes are advised to consult their own tax advisors regarding the federal, state, local and foreign tax consequences relevant to the ownership and disposition of the Notes, Warrants and our common stock in their particular situations.

As used herein, the term U.S. holder means a beneficial holder of a Note or Warrant or our common stock that for U.S. federal income tax purposes is (i) a citizen or resident (as defined in Section 7701(b) of the Code) of the United States, (ii) an entity treated as a corporation for U.S. federal income tax purposes created or organized in or under the laws of the U.S. or any political subdivision thereof, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source and (iv) a trust if it (a) is subject to the primary supervision of a court within the U.S. and one or more U.S. persons have authority to control all substantial decisions of the trust or (b) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person. A non-U.S. holder is any beneficial holder of a Note or Warrant or our common stock other than a U.S. holder or a foreign or domestic entity treated as a partnership for U.S. federal income tax purposes.

If a partnership (including for this purpose any entity, domestic or foreign, treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of Notes, Warrants or our common stock, the U.S. tax treatment of a partner in the partnership generally will depend on the status of the partner and the activities of the partnership. As a general matter, income earned through a foreign or domestic partnership is included in the income of its owners. A holder of Notes, Warrants or our common stock that is a partnership, and partners in such a partnership, should consult their own tax advisors about the U.S. federal income tax consequences of owning and disposing of Notes, Warrants and our common stock.

Table of Contents

Characterization of the Notes, Issue Price and Allocation of Purchase Price

We intend to treat the Notes as indebtedness for U.S. federal income tax purposes. Such characterization is binding on us, but not on the IRS or a court. Under U.S. federal income tax rules, each holder of a Note must also treat the Note as indebtedness unless such holder makes adequate disclosure of contrary treatment on such holder's U.S. federal income tax return. The Notes have a number of equity-like features, and it is possible that the IRS or a court may determine that the Notes should be treated as equity for U.S. federal income tax purposes, in which case the tax consequences of owning and disposing of the Notes would differ materially from those set forth below. We have not sought an IRS ruling or an opinion of counsel regarding our intended tax treatment of the Notes.

For U.S. federal income tax purposes, the Notes and Warrants will be treated as a unit upon original issuance. The issue price of such units is the first price at which a substantial portion of the units are sold, disregarding sales to bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers. The issue price of a Note or Warrant is determined by allocating the issue price of a unit between the Note and the Warrants based on their relative fair market values on the issue date. We intend to treat 72 percent of the issue price of each unit as allocable to the Note included in such unit, 12 percent as allocable to the Series A Warrants included in such unit, 7 percent as allocable to the Series B Warrants potentially issuable in connection with such Series A Warrants and 9 percent as allocable to the Series C Warrants included in such unit. Our allocation of the issue price is binding on a holder of the Notes, unless the holder explicitly discloses on a statement attached to its timely filed U.S. federal income tax return for the year in which it acquires the Notes that it has made a different determination. Our allocation is not binding on the IRS or any court, however, and it is possible that the IRS may challenge such allocation. Whether or not a holder acquires a unit at the issue price of the units, the holder will be required to allocate such holder's purchase price between the Notes and the Warrants based upon their relative fair market values as of the date of the purchase (and, as noted above, will generally be bound by our allocation with respect to acquisitions occurring on the issue date, unless it is explicitly disclosed on the holder's U.S. federal income tax return for the year of the purchase that a different allocation is being used).

Classification of the Notes as Contingent Payment Debt Instruments

If a debt instrument provides for one or more contingent payments, the debt instrument may be subject to special tax treatment under the tax rules relating to contingent payment debt obligations (the Contingent Payment Debt Regulations). For purposes of determining whether a debt instrument provides for one or more contingent payments, the Contingent Payment Debt Regulations provide that a payment is not a contingent payment merely because of a contingency that, as of the issue date, is either remote or incidental. A debt instrument is not subject to the Contingent Payment Debt Regulations merely because it is convertible into stock of the issuer or of a related party. However, if the debt instrument is otherwise subject to the Contingent Payment Debt Regulations, the possibility of a conversion is a contingency for purposes of applying the Contingent Payment Debt Regulations.

There are a number of potential contingencies with respect to the Notes that may cause the Notes to be subject to the Contingent Payment Debt Regulations. These include (i) our right to pay interest on the Notes in shares of our common stock, which shares may have a value, as of the date of such payment, that differs from the amount of interest that would have been payable had we paid interest in cash, (ii) the right of holders in certain circumstances to extend the maturity of the Notes, (iii) the right of holders to have their Notes redeemed upon the occurrence of certain change in control events, (iv) the requirement that the Notes be mandatorily redeemed upon the occurrence of certain change in control events, (v) our right to mandatorily convert the Notes in certain circumstances, (vi) the fact that the Conversion Amount is adjusted to reflect the Present Value of Interest in the event of a conversion prior to the date of Stated Maturity and (vii) the right of holders of Notes to receive distributions made on our shares of common stock to the same extent as if they had converted the Notes into shares of common stock.

Table of Contents

We intend to take the position (and this discussion assumes) that (i) there are contingencies with respect to payments on the Notes apart from contingencies that are (a) in the aggregate, remote, (b) in the aggregate, incidental, (c) related merely to the possibility of impairment of payments as a result of insolvency, default or similar circumstances or (d) represented by an option to convert a Note into common stock or into cash or other property in an amount equal to the value of such common stock and (ii) even disregarding contingencies described in any of clauses (a) through (d), it is not the case that (x) the timing and amount of all alternative payment schedules on the Notes are known and (y) there is a single payment schedule with respect to the Notes that is significantly more likely than not to occur. Accordingly, we will take the position that the Contingent Payment Debt Regulations apply to the Notes. Holders should note that under Treasury Regulations our determination that a contingency is remote or incidental is binding on all holders except with respect to a holder that explicitly discloses a contrary determination in the holder's timely filed U.S. federal income tax return for the taxable year that includes the acquisition of the Notes. Holders may learn of our specific determinations regarding the status as remote or incidental of the contingencies associated with the Notes by calling our corporate controller at (858) 410-4600.

Notwithstanding the foregoing, the U.S. federal income tax treatment of the Notes (or debt instruments comparable to them) has not been the subject of authoritative guidance from the IRS. Thus, the U.S. federal income tax treatment of the Notes is not certain, and no assurance can be given that the IRS will agree with our position that the Contingent Payment Debt Regulations apply to the Notes or with other positions we will take with respect to the U.S. federal income tax matters relating to the Notes. We have not sought or received an IRS ruling or an opinion of counsel concerning our intended tax treatment of the Notes, and our treatment is not binding on the IRS or the courts.

If, contrary to our intended treatment, the Notes are not treated by the IRS as contingent payment debt instruments, the Notes would not be subject to the Contingent Payment Debt Regulations, and as a result the amount, timing and character of income, gain or loss with respect to holders of the Notes could be significantly affected, potentially in an adverse manner. Holders are urged to consult their tax advisors regarding the tax consequences of the Notes being treated as other than contingent payment debt instruments, the applicability of any proposed legislation (and the prospects of applicable future legislation) and the possible effects of changes in relevant tax laws.

Unless specified otherwise, the remainder of this discussion generally assumes that the Notes will be treated as indebtedness that is subject to the Contingent Payment Debt Regulations. Note, however, that if the Notes were ultimately found not to be subject to the Contingent Payment Debt Regulations, the statements and conclusions set forth below would be materially affected.

U.S. Holders

This section summarizes certain U.S. federal income tax consequences of the ownership and disposition by U.S. holders of Notes, Warrants and our common stock acquired in connection with Notes or Warrants.

Ownership and Disposition of the Notes and Warrants

Application of the Contingent Payment Debt Regulations

Under the Contingent Payment Debt Regulations, a U.S. holder, regardless of its method of accounting, is required to accrue interest income (as original issue discount, or OID, for U.S. federal income tax purposes) on the Notes on a constant yield basis at an assumed yield (the comparable yield). The comparable yield is based on the yield at which we could have issued, at the time of issuance of the Notes, a comparable noncontingent, nonconvertible, fixed-rate debt instrument with terms and conditions otherwise similar to the Notes, and therefore the comparable yield will likely be significantly higher than the stated interest on the Notes. Accordingly, U.S. holders generally will be required to include in income an amount of interest in excess of the interest payments made on the Notes (subject to adjustment as described below).

Table of Contents

Solely for purposes of determining the amount of interest income that a U.S. holder is required to accrue for U.S. federal income tax purposes, a projected payment schedule must be constructed in respect of the Notes representing a series of payments (including issuances of our common stock upon conversion) the amount and timing of which produce a yield to maturity on the Notes equal to the comparable yield. The projected payment schedule will include the amount of each noncontingent payment and an estimate for each contingent payment, taking into account the conversion feature. Holders may learn of our determination regarding the comparable yield and projected payment schedule with respect to the Notes by calling our corporate controller at (858) 410-4600. Holders will be bound by the projected payment schedule that we determine unless our projected payment schedule is unreasonable. A holder that determines its own projected payment schedule must explicitly disclose this fact on a statement attached to the holder's timely filed U.S. federal income tax return for the taxable year in which such holder acquires its Notes and must state why our projected payment schedule is unreasonable. Based on the comparable yield and the issue price of the Notes, a U.S. holder of a Note (regardless of its accounting method) will be required to accrue as interest income the sum of the daily portions of interest on a Note for each day in the taxable year on which the U.S. holder holds the Note, adjusted upward or downward to reflect the difference, if any, between the actual and projected amount of any contingent payments on the Notes (as set forth below). The daily portions of interest are determined by allocating to each day in an accrual period (generally, the periods between interest payments) the ratable portion of the interest that accrues in the accrual period. The amount of interest that accrues in each accrual period is the product of the comparable yield and the Note's adjusted issue price at the beginning of the accrual period.

In addition to the interest accruals discussed above, if the actual amount of a payment on the Notes exceeds the projected amount thereof, a U.S. holder will generally incur a positive adjustment under the Contingent Payment Debt Regulations equal to the amount of such excess. Similarly, if the actual amount of a payment on the Notes is less than the projected amount thereof, a U.S. holder will generally incur a negative adjustment equal to the amount of such deficit. A net positive adjustment incurred by a U.S. holder in a taxable year with respect to the Notes will be treated as additional interest income. A net negative adjustment, on the other hand, will (i) reduce the U.S. holder's interest income on the Notes for that taxable year; and (ii) to the extent of any excess after the application of (i), give rise to an ordinary loss to the extent of the U.S. holder's interest income on the Notes during prior taxable years that have not been offset by prior net negative adjustments; any net negative adjustment in excess of the amounts described in (i) and (ii) will then be carried forward.

Under the Contingent Payment Debt Regulations, a Note's adjusted issue price will equal the original issue price of the Note, increased by the interest previously accrued on the Note as described in the second preceding paragraph above (determined without regard to any adjustments described in the preceding paragraph) and decreased by the amount of any noncontingent payment and the projected amount of any contingent payment previously made on the Note. Subject to certain adjustments described in the third succeeding paragraph below, a U.S. holder's basis in a Note will be increased by the amount of interest accrued by such holder under the rules set forth in the second preceding paragraph above (determined without regard to any adjustments described in the preceding paragraph) and decreased by the amount of any noncontingent payment and the projected amount of any contingent payment previously made on the Note.

If a U.S. holder sells, exchanges (other than by conversion into our common stock), redeems or retires a Note, such U.S. holder will generally recognize gain or loss equal to the difference between the amount realized on the sale, exchange, redemption or retirement (including the fair market value of our common stock received, if any) and such U.S. holder's adjusted tax basis in the Note (as determined under the Contingent Payment Debt Regulations). A U.S. holder generally will treat any gain as interest income, and any loss as ordinary loss to the extent of the excess of previous interest inclusions over the total negative adjustments previously taken into account as ordinary loss, and the balance as capital loss (which will be long-term capital loss if the Notes were held for more than one year as of the date of disposition). The deductibility of capital losses is subject to limitations.

Finally, the amount to be received (including in the form of our common stock) by a U.S. holder upon the conversion of a Note will be treated as a contingent payment under the Contingent Payment Debt Regulations,

Table of Contents

and the calculation of the comparable yield and the projected payment schedule for the Notes will take into account the receipt of stock upon conversion. Therefore, if (i) conversion occurs in the year projected and the value of the stock received is greater than the stock's projected value on the projected payment schedule, or (ii) conversion occurs prior to the year projected, under the Contingent Payment Debt Regulations the value of the stock received upon conversion in excess of the projected amount for that year, if any, will constitute a positive adjustment in the year of conversion that will give rise to additional interest income to the holder (subject to potential adjustments). If, instead, (i) conversion occurs in the year projected and the value of the stock received is less than the stock's projected value on the projected payment schedule, or (ii) conversion occurs after the year projected (or if conversion never actually occurs), the excess of the stock's projected value over the value of the stock received in the year conversion was projected to occur (if any) will constitute a negative adjustment in that year that will result in ordinary loss to the holder (subject to potential adjustments, including a positive adjustment if conversion occurs in a later year).

If a U.S. holder's adjusted basis in a Note differs from the Note's adjusted issue price, the holder must reasonably allocate the difference between basis and adjusted issue price to daily portions of interest or projected payments over the remaining term of the instrument. Where the holder's basis exceeds the adjusted issue price, such allocation is treated as a negative adjustment on the date the daily portion accrues or the payment is projected to be made and on the date of the adjustment the holder's adjusted basis in the Note is reduced by the amount treated as a negative adjustment. Where the holder's basis is less than the adjusted issue price, the allocation is treated as a positive adjustment on the date the daily portion accrues or the payment is projected to be made and on the date of the adjustment the holder's adjusted basis in the Note is increased by the amount of such positive adjustment.

Adjustments to Conversion Price or Exercise Price of Notes or Warrants

The terms of the Notes and Warrants provide for changes in their conversion price or exercise price in certain circumstances. The tax consequences of such changes will depend on the exact circumstances at the time such changes are made and on the nature of the changes. In addition, the tax law is unclear in some respects with respect to the tax consequences of such changes.

A change in the conversion price or exercise price, or failure to change the conversion price or exercise price, that has the effect, at the time made, of increasing a U.S. holder's proportionate interest in our earnings and profits may be treated as though the holder received a distribution in the form of our common stock, depending on the exact circumstances. For example, if at any time we make a distribution of cash or property to our stockholders that would be taxable to the stockholders as a dividend for U.S. federal income tax purposes and, in accordance with the exercise price provisions of the Warrants (described above in *Description of Warrants Adjustment of Exercise Price; Anti-Dilution Provisions*), the exercise price of the Warrants is decreased, that adjustment may be deemed to be the payment of a taxable dividend to a U.S. holder of a Warrant to the extent of our current and accumulated earnings and profits (as determined under U.S. federal income tax principles), notwithstanding the fact that the U.S. holder does not receive a cash payment. An increase in the conversion price, or a decrease in the exercise price at our discretion or in certain other circumstances may also be deemed to be the payment of a taxable dividend to U.S. holders. However, a change in the conversion price of a Note or in the exercise price of a Warrant solely to prevent the dilution of a U.S. holder's interests upon a stock split or other change in our capital structure, if made under a bona fide, reasonable adjustment formula, will not in most circumstances be treated as a constructive stock distribution.

Any taxable constructive stock distribution resulting from a change to, or failure to change, the conversion price of a Note or exercise price of a Warrant will be treated in the same manner as distributions paid in cash or other property as described below under *Ownership and Disposition of Our Common Stock*. It is unclear under current law, however, whether a constructive dividend would be eligible for the reduced rates of U.S. federal income tax applicable to certain dividends received by noncorporate U.S. holders. Similarly, it is also unclear under current law whether a corporate U.S. holder would be entitled to claim a dividends-received deduction.

Table of Contents

with respect to a constructive dividend. U.S. holders should carefully review the conversion rate adjustment provisions of the Notes and the exercise price adjustment provisions of the Warrants and consult their own tax advisors with respect to the tax consequences of any such adjustment.

Election to Exercise a Warrant

Except as noted below, upon your exercise of a Warrant, a U.S. holder will not be required for U.S. federal income tax purposes to recognize taxable gain or loss with respect to the Warrant. A U.S. holder's initial U.S. federal tax basis in the shares of common stock received pursuant to the exercise will equal the sum of (i) the U.S. federal income tax basis that the U.S. holder had in the Warrant that was exercised (see the discussion above under "Characterization of the Notes, Issue Price and Allocation of Purchase Price") and (ii) the amount paid in connection with the exercise of such Warrant. A U.S. holder's holding period for U.S. federal income tax purposes in the shares of common stock received upon exercise of a Warrant will begin on the date of exercise of the Warrant and will not include the period during which the U.S. holder held the Warrant that was exercised.

Although the proper U.S. federal income tax treatment of such transactions is unclear, it is possible that a cashless exercise of a Warrant would be treated as part of a reorganization for U.S. federal income tax purposes, in which case the holding period in the common stock received would include the holding period in the Warrant exercised.

Sale, Exchange or other Disposition of the Warrants

Upon a sale, exchange or other disposition of a Warrant, a U.S. holder will generally recognize gain or loss equal to the difference (if any) between (i) the amount of cash and the fair market value of any property received in exchange therefor and (ii) such holder's adjusted tax basis in the Warrant. A U.S. holder's adjusted tax basis in a Warrant will generally equal its purchase price (or the portion of a purchase price for a unit allocated to such Warrant). Any such gain or loss recognized on the sale, exchange or other disposition of a Warrant should be capital gain or loss and will generally be long-term capital gain or loss if the Warrant has been held for more than 12 months at the time of the disposition. Generally, long-term capital gain for individuals is eligible for a reduced rate of taxation. Capital gain that is not long-term capital gain is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations.

Ownership and Disposition of Our Common Stock

Distributions (including constructive distributions), if any, paid on our common stock generally will constitute taxable dividends to the extent made from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Any distribution in excess of our current and accumulated earnings and profits will be treated first as a tax-free return of capital, which will reduce the U.S. holder's adjusted tax basis in the shares (but not below zero). To the extent such a distribution exceeds the U.S. holder's adjusted tax basis in the shares, the distribution will be taxable as capital gain on a deemed disposition of our common stock. Dividend income that is received by an individual U.S. holder in a tax year beginning on or before December 31, 2010 and that satisfies certain requirements (including certain holding period requirements) generally will be subject to tax at a reduced rate. Unless the reduced rate provision is extended or made permanent by subsequent legislation, for tax years beginning after December 31, 2010, distributions taxable as dividends to an individual U.S. holder will be taxed at regular ordinary income rates. Subject to certain restrictions, a portion of a distribution taxable as a dividend that is received by a U.S. holder that is a corporation will be eligible for a dividends received deduction.

Gain or loss realized on the sale, exchange, or other taxable disposition of common stock will equal the difference between the amount of cash and the fair market value of any other property received in exchange for such stock and the U.S. holder's adjusted tax basis in such stock. Such gain or loss will generally be capital gain or loss, and will be long-term capital gain or loss if the holder has held or is deemed to have held the common

Table of Contents

stock for more than twelve months. Generally, long-term capital gain of non-corporate U.S. holders is subject to U.S. federal income tax at a reduced rate. The deductibility of capital losses is subject to certain limitations.

Backup Withholding and Information Reporting

We are required to furnish to record holders of the Notes and our common stock, other than corporations and other exempt holders, and to the IRS, information with respect to interest income on the Notes and dividends paid on our common stock.

A U.S. holder may be subject to backup withholding with respect to interest income on the Notes, dividends paid on our common stock and proceeds received from a disposition of Notes, Warrants or our common stock. The backup withholding rate is currently 28%. Certain holders (including, among others, corporations and certain tax-exempt organizations) generally are not subject to backup withholding. A U.S. holder will be subject to backup withholding if such holder is not otherwise exempt and such holder

fails to furnish such holder's U.S. taxpayer identification number, which for an individual is ordinarily his or her social security number;

furnishes an incorrect taxpayer identification number;

has been notified by the IRS that such holder has failed to properly report payments of interest or dividends; or

fails to certify, under penalties of perjury, that such holder has furnished a correct taxpayer identification number and that the IRS has not notified such holder that such holder is subject to backup withholding.

To establish status as an exempt person, a U.S. holder will generally be required to provide a certification on IRS Form W-9 (or substitute form).

U.S. holders should consult their own tax advisors regarding their qualification for an exemption from backup withholding and the procedures of obtaining such an exemption, if applicable. Backup withholding tax is not an additional tax and taxpayers may use amounts withheld as a credit against their U.S. federal income tax liability or may claim a refund as long as they timely provide certain information to the IRS.

Non-U.S. Holders

The following is a discussion of certain U.S. federal income tax consequences of the ownership and disposition of Notes, Warrants or our common stock acquired in connection with Notes or Warrants by a non-U.S. holder (as defined above). Special rules, which are not discussed here, apply to certain non-U.S. holders such as controlled foreign corporations, passive foreign investment companies, persons eligible for benefits under income tax conventions to which the U.S. is a party and U.S. expatriates. Non-U.S. holders should consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them in light of their particular circumstances.

For purposes of withholding tax on interest and dividends discussed below, a non-U.S. holder includes a nonresident fiduciary of an estate or trust. For purposes of the following discussion, any interest or dividend income and any gain on the sale, exchange, redemption, retirement or other disposition of a Note or Warrant or common stock will be considered to be U.S. trade or business income if such income or gain is (i) effectively connected with the conduct of a U.S. trade or business and (ii) in the case of a non-U.S. holder eligible for the benefits of an applicable U.S. bilateral income tax treaty, attributable to a permanent establishment in the U.S. Generally, U.S. trade or business income is not subject to U.S. withholding tax (provided the non-U.S. holder complies with applicable certification and disclosure requirements). Instead, such income is generally subject to U.S. federal income tax on a net income basis at regular graduated tax rates. Any U.S. trade or business income

Table of Contents

received by a non-U.S. holder that is a corporation may, under certain circumstances, be subject to an additional branch profits tax at a 30 percent rate or a lower rate that an applicable income tax treaty may specify.

Interest

Payments of interest to nonresident persons or entities are generally subject to U.S. federal income tax at a rate of 30 percent, collected by means of withholding by the payor. However, interest income on a Note (including OID) of non-U.S. holders may qualify as portfolio interest, and thereby be exempt from U.S. withholding tax, if such holders certify their foreign status as described below. The portfolio interest exception will not apply, however, to interest income on a Note (including OID) of a non-U.S. holder that:

owns, actually or constructively (including by reason of the ability to acquire our common stock by conversion of a Note or exercise of a Warrant), at least 10 percent of the total combined voting power of all classes of our stock entitled to vote;

is a controlled foreign corporation (as defined for U.S. federal income tax purposes) that is related, directly or indirectly, to us; or

is a bank that, as a result of its acquisition of a Note, is treated for purposes of Section 881 of the Code as having made a loan to us in the ordinary course of its trade or business.

Even if the portfolio interest exception does not apply, interest income on a Note (including OID) of a non-U.S. holder might be subject to withholding tax at a reduced rate under the terms of a tax treaty between the U.S. and the non-U.S. holder's country of residence. The portfolio interest exception, entitlement to treaty benefits and several of the special rules for non-U.S. holders described below apply only if the non-U.S. holder certifies its foreign status. A non-U.S. holder can generally meet this certification requirement by providing an accurate and complete IRS Form W-8BEN or appropriate substitute or successor form executed under penalties of perjury to us or our paying agent. If the non-U.S. holder holds the Notes through a financial institution or other agent acting on the holder's behalf, the holder may be required to provide appropriate certifications to the agent. The holder's agent will then generally be required to provide appropriate certifications to us. Special rules in U.S. Treasury Regulations apply to foreign partnerships, estates, and trusts, and in certain circumstances certifications as to foreign status of partners, trust owners, or beneficiaries may have to be provided to us to avoid imposition of withholding tax. In addition, special rules apply to qualified intermediaries that enter into withholding agreements with the IRS, and such intermediaries generally are not required to forward any certification forms received from non-U.S. holders. The portfolio interest exception, described above, may not apply if the interest is U.S. trade or business income (as defined above). In such case, a non-U.S. holder will be subject to regular U.S. federal income tax on interest income on a Note (including OID) that is U.S. trade or business income; and, if the non-U.S. holder is a corporation, a U.S. branch profits tax equal to 30 percent of its effectively connected earnings and profits, subject to adjustments, unless the holder qualifies for an exemption from such tax or a lower tax rate under an applicable treaty. We urge non-U.S. holders to consult their own tax advisors for information on the impact of these withholding and certification rules.

In addition, as described above under Application of the Contingent Payment Debt Regulations, we note that interest income on the Notes, including for purposes of the withholding rules described above, will include certain amounts received on a redemption or conversion of the Notes

Payment on the Notes that result from the right of the Notes to participate with respect to dividends or distributions on the common stock will not be eligible for the portfolio interest exception from withholding tax and, accordingly, will be subject to 30 percent withholding unless an exemption or reduced rate is available under an income tax treaty or the payments are treated as U.S. trade or business income and, in either case, certification and documentation requirements are satisfied.

Table of Contents*Dividends*

If we make distributions (including constructive distributions) on our common stock, any such distributions paid to a non-U.S. holder will generally constitute dividends for U.S. federal income tax purposes to the extent such distributions are paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment to the extent of the non-U.S. holder's adjusted tax basis in our common stock. Any remaining excess will be treated as capital gain.

In general, dividends paid or constructive dividends deemed paid to a non-U.S. holder of common stock will be subject to withholding of U.S. federal income tax at a 30 percent rate unless such rate is reduced by an applicable income tax treaty between the U.S. and the non-U.S. holder's country of residence and the holder complies with the applicable certification requirements described below. Dividends that are U.S. trade or business income are generally subject to U.S. federal income tax at regular income tax rates as though the non-U.S. holder were a U.S. resident, but are not generally subject to the 30 percent withholding tax or treaty-reduced rate if the non-U.S. holder files a properly executed IRS Form W-8ECI (or appropriate substitute form), as applicable with the payor. Any U.S. trade or business income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional branch profits tax at a 30 percent rate or such lower rate as may be applicable under an income tax treaty. A non-U.S. holder of common stock who wishes to claim the benefit of an applicable treaty rate must provide a properly executed IRS Form W-8BEN (or appropriate substitute form), as applicable. In addition, a non-U.S. holder may under certain circumstances be required to obtain a U.S. taxpayer identification number and make certain certifications to us in order to claim treaty benefits. If a non-U.S. holder holds common stock through a foreign partnership or a foreign intermediary, the foreign partnership or foreign intermediary will also be required to comply with certain certification requirements. A non-U.S. holder of common stock that is eligible for a reduced rate of U.S. withholding tax pursuant to an income tax treaty may obtain a refund of amounts withheld at a higher rate by filing an appropriate claim for a refund with the IRS. Non-U.S. holders should consult their tax advisors with respect to their entitlement to benefits under a relevant income tax treaty.

Changes in Conversion Price or Exercise Price

The conversion price of the Notes and the exercise prices of the Warrants are subject to adjustment in certain circumstances. Such adjustments could give rise to a deemed distribution to a non-U.S. holder of the Notes or Warrants, as described above in *Adjustments to Conversion Price or Exercise Price of Notes or Warrants*. In such events, the deemed distribution would constitute a dividend for U.S. federal income tax purposes to the extent of our current or accumulated earnings and profits. Any such dividends will generally be taxed as described above in *Non-U.S. Holders Dividends*.

Conversion of Notes

Except as described above as a result of application of the Contingent Payment Debt Regulations, a non-U.S. holder generally will not be subject to U.S. federal income tax on the conversion of Notes into our common stock.

Sale, Exchange, Repurchase, Retirement or Redemption of Notes, Warrants or Common Stock

Except as described below, and subject to the discussion concerning backup withholding below, any gain realized by a non-U.S. holder on the sale, exchange (other than a conversion of Notes into our common stock), repurchase, retirement, redemption or other disposition of a Note, Warrant or our common stock generally will not be subject to U.S. federal income tax, unless (i) such gain is U.S. trade or business income, (ii) subject to certain exceptions, the non-U.S. holder is an individual who holds the Note, Warrant or our common stock as a capital asset and is present in the U.S. for 183 days or more in the taxable year of the disposition, (iii) the non-U.S. holder is subject to tax pursuant to the provisions of U.S. tax law applicable to certain U.S. expatriates

Table of Contents

(including certain former citizens or residents of the U.S.), or (iv) we are or have been a U.S. real property holding corporation, or a USRPHC, within the meaning of Section 897 of the Code at any time during the shorter of the five-year period ending on the date of disposition and the non-U.S. holder's holding period for the Notes, Warrants or common stock.

We believe that we have not been and are not currently a USRPHC for U.S. federal income tax purposes, nor do we anticipate becoming a USRPHC in the future. However, no assurance can be given that we will not be a USRPHC when a non-U.S. holder disposes of Notes, Warrants or common stock.

In the circumstances described in clause (iv) of the second preceding paragraph, if for the year in which the sale, exchange, retirement or redemption occurs any class of our stock is regularly traded on an established securities market (as such terms are defined in applicable Treasury Regulations), then U.S. federal income tax generally will only apply (unless one of the other clauses of the preceding paragraph applies or the following paragraph applies) where, (x) in the case of our Notes, (1) our Notes are regularly traded on an established securities market and the holder owned more than 5% of the value of the Notes at any time during the five year period ending on the date of disposition or (2) our Notes are not regularly traded on an established securities market but, on the date the holder acquired the Notes, such holder held Notes with a fair market value greater than the fair market value on such date of (a) 5 percent of the regularly traded class of our stock with the lowest fair market value or (b) if our common stock is regularly traded on an established securities market, 5% of our common stock, (y) in the case of our Warrants (1) such Warrants are regularly traded on an established securities market and the holder owned more than 5% of the value of such Warrants at any time during the five year period ending on the date of disposition or (2) such Warrants are not regularly traded on an established securities market but, on the date the holder acquired the Warrants, such holder held Warrants of such class with a fair market value greater than the fair market value on such date of 5 percent of the regularly traded class of our stock with the lowest fair market value, and (z) in the case of our common stock, (1) our common stock is regularly traded on an established securities market and the holder owned more than 5% of the value of the our common stock at any time during the five year period ending on the date of disposition or (2) our common stock is not regularly traded on an established securities market but, on the date the holder acquired the common stock, such holder held common stock with a fair market value greater than the fair market value on such date of 5 percent of the regularly traded class of our stock with the lowest fair market value. For purposes of clauses (x)(2), (y)(2) and (z)(2) above, all Notes, Warrants of the relevant class or common stock, as the case may be, owned will be treated as acquired on the date of acquisition of a Note, Warrant or share of common stock, as the case may be, if the effect of such treatment is to cause U.S. federal income tax to apply. Constructive ownership rules apply for purposes of the determinations described in this paragraph. In certain circumstances, ownership of Notes, Warrants and common stock by a holder will be aggregated for purposes of determining whether the 5 percent thresholds described in this paragraph have been satisfied.

Non-U.S. holders should note that as a result of the application of the Contingent Payment Debt Regulations, amounts received upon a sale, exchange or other disposition of Notes will be treated as ordinary interest income (subject to the rules described in [Interest](#) above).

Backup Withholding and Information Reporting

Information may be required to be reported to non-U.S. holders and to the IRS concerning amounts paid on the Notes or dividends paid on our common stock. Under current U.S. federal income tax law, backup withholding tax (at the rate of 28 percent) will not apply to such payments if the required certifications of exempt status are received, provided in each case that the payor, including a bank or its paying agent, as the case may be, does not have actual knowledge or reason to know that the payee is a nonexempt person.

Under the U.S. Treasury Regulations, payments on the sale, exchange or other disposition of Notes, warrants or our common stock effected through a foreign office of a broker to its customer generally are not subject to information reporting or backup withholding. However, if the broker is a U.S. person, a controlled

Table of Contents

foreign corporation for U.S. federal income tax purposes, a foreign person 50 percent or more of whose gross income is effectively connected with a U.S. trade or business for a specified 3-year period, a foreign partnership with significant U.S. ownership, a foreign partnership, if at any time during its taxable year, the foreign partnership is engaged in a U.S. trade or business, or a U.S. branch of a foreign bank or insurance company, then information reporting will be required, unless the broker has in its records documentary evidence that the beneficial owner of the payment is not a U.S. person or is otherwise entitled to an exemption, and the broker has no actual knowledge that the beneficial owner is not entitled to an exemption. Backup withholding may apply if the sale is subject to information reporting and the broker has actual knowledge that the beneficial owner is a U.S. person.

The information reporting and backup withholding rules will apply to payments effected at a U.S. office of any U.S. or foreign broker, unless the broker has in its records documentary evidence that the beneficial owner of the payment is not a U.S. person or is otherwise entitled to an exemption, and the broker has no actual knowledge that the beneficial owner is not entitled to an exemption.

Non-U.S. holders should consult their own tax advisors regarding the application of withholding and backup withholding in their particular circumstances and the availability of and procedure for obtaining an exemption from withholding, information reporting and backup withholding under the current U.S. Treasury Regulations. Backup withholding does not represent an additional income tax. Any amounts withheld from a payment to a holder under the backup withholding rules will be allowed as a credit against the non-U.S. holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information or returns are timely furnished by such holder to the IRS.

The preceding discussion of certain U.S. federal income tax consequences is for general information only and is not tax advice. Accordingly, each investor should consult its own tax advisor as to particular tax consequences to it of owning and disposing of Notes, Warrants and our common stock, including the applicability and effect of any state, local or foreign tax laws, and of any proposed changes in applicable laws.

Table of Contents**PLAN OF DISTRIBUTION**

We have entered into a placement agency agreement with Seven Hills Partners LLC pursuant to which Seven Hills Partners LLC has agreed to act as our exclusive placement agent in connection with the offering. The placement agent is using its best efforts to introduce us to selected institutional investors who will purchase the Notes and the Warrants. The placement agent has no obligation to buy any of the Notes and the Warrants from us, nor is the placement agent required to arrange the purchase or sale of any specific number or dollar amount of the Notes and the Warrants, but the placement agent has agreed to use its best efforts to arrange the sale of all of the Notes and the Warrants.

We will enter into a securities purchase agreement directly with investors in connection with this offering, and we will only sell to investors who have entered into such securities purchase agreement. All investor funds will be deposited into an escrow account set up at Wells Fargo Bank, N.A. Wells Fargo Bank, acting as escrow agent, will invest all funds it receives in a non-interest bearing account. No investor funds will be accepted by us prior to the date of this prospectus supplement. Upon closing, we will deliver to each investor the Notes and the Warrants purchased by such investor. We expect to deliver the Notes and the Warrants being offered pursuant to this prospectus supplement on or about August 27, 2007.

We have agreed to indemnify the placement agent and certain other persons against certain liabilities under the Securities Act. The placement agent has informed us that it will not engage in overallotment, stabilizing transactions or syndicate covering transactions in connection with this offering.

We have agreed to pay the placement agent a fee equal to 4.8% of the total gross proceeds of this offering. Upon the closing of the offering, we will pay to the placement agent 4.8% of the total gross proceeds received by us at the closing, excluding the portion of the gross proceeds deposited in the cash collateral account with Wells Fargo Bank to secure the letter of credit. Upon the release of the funds in such cash collateral account to us, we will pay to the placement agent 4.8% of the funds (including any interest thereon) received by us upon such release.

The following table shows the fees we will pay to the placement agent assuming the sale of all of the Notes and the Warrants offered pursuant to this prospectus supplement and the accompanying prospectus, and assuming the release of all of the funds in the cash collateral account to secure the letter of credit.

| | |
|----------|------------|
| Per Note | 4.8% |
| Total | \$ 960,000 |

We have also agreed to pay to the placement agent a fee equal to 4.8% of the funds received by us upon the exercise, if any, of the Warrants. This fee is not reflected in the foregoing table. Because we may determine to sell less than the maximum amount of Notes and the Warrants offered pursuant to this prospectus supplement and the accompanying prospectus, the actual total fee may be less than the maximum amount set forth above. We will also reimburse the Placement Agent for up to \$75,000 of legal and out of pocket expenses incurred by the Placement Agent.

We and Howard C. Birndorf, our Chairman and Chief Executive Officer, have agreed to a 30-day lock-up with respect to our common shares and other of our securities that Mr. Birndorf beneficially owns, including securities convertible into our common shares and securities that are exchangeable or exercisable for our common shares. This means that, subject to certain exceptions, for a period of 30 days following the commencement of this offering, we and Mr. Birndorf may not (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock; or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock, without the prior written consent of Seven Hills Partners LLC.

Table of Contents

In addition, we have further agreed that, without the prior written consent of Seven Hills Partners LLC, we will not offer, announce the intention to offer, or sell any shares of common stock, any securities convertible into or exercisable or exchangeable for common stock or any of our other equity securities as part of an equity financing of our company from the date hereof until November 27, 2007, other than in connection with (i) a consolidation or merger of our company with or into any other corporation or other entity, provided that such consolidation or merger is not effected solely to merge or consolidate with a wholly-owned subsidiary of our company, or (ii) any acquisition of the capital stock or assets of any other corporation or other entity, provided that such other corporation or entity is not a wholly-owned subsidiary of our company. The foregoing offer restriction period shall end prior to November 27, 2007 if the average closing price for our common stock for 20 consecutive trading days during such period is equal to or exceeds \$2.50 per share.

This is a brief summary of the material provisions of the placement agency agreement and does not purport to be a complete statement of its terms and conditions. Copies of the placement agency agreement and the securities purchase agreement will be filed with the SEC and incorporated by reference into the Registration Statement of which this prospectus supplement forms a part. See **Where You Can Find More Information** on page S-47 of this prospectus supplement.

The placement agent or its affiliates may in the future provide investment banking, commercial banking and/or other services to us from time to time, for which they may in the future receive customary fees and expenses.

S-46

Table of Contents

LEGAL MATTERS

The validity of the Notes and Warrants offered by this prospectus supplement has been passed upon for us by Morgan, Lewis & Bockius LLP, San Francisco, California.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement that we filed with the SEC. The registration statement that contains this prospectus, including the exhibits to the registration statement, contains additional information about us and the securities offered by this prospectus.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our public filings, including reports, proxy and information statements, are also available on the SEC's web site at <http://www.sec.gov>. The information on our web site does not constitute part of this document.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference information from other documents that we file with them, which means that we can disclose important information by referring to those documents. The information incorporated by reference is considered to be part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference into this prospectus supplement the documents listed below, and any future filings (other than the portions thereof deemed to be furnished to the SEC pursuant to Item 2.02 or Item 7.01 of Form 8-K) we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering:

our quarterly report on Form 10-Q for the quarter ended June 30, 2007, filed with the SEC on August 9, 2007;

our quarterly report on Form 10-Q for the quarter ended March 31, 2007, filed with the SEC on May 10, 2007;

our annual report on Form 10-K for the year ended December 31, 2006, filed with the SEC on March 16, 2007;

our current report on Form 8-K filed with the SEC on August 27, 2007;

our current report on Form 8-K filed with the SEC on June 15, 2007;

our current report on Form 8-K filed with the SEC on May 3, 2007;

our current report on Form 8-K filed with the SEC on February 23, 2007;

our current report on Form 8-K filed with the SEC on February 5, 2007; and

the description of our common stock contained in our registration statement on Form 8-A filed under Section 12(g) of the Exchange Act with the SEC on April 7, 1998, including any amendment or reports filed for the purpose of updating such description.

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To the extent that any statement in this prospectus is inconsistent with any statement that is incorporated by reference and that was made on or before the date of this prospectus, the statement in this prospectus shall supersede such incorporated statement. The incorporated statement shall not be deemed, except as modified or superseded, to constitute a part of this prospectus or the registration statement. Statements contained in this

S-47

Table of Contents

prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of each contract or document filed as an exhibit to the registration statement.

We will furnish without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request, a copy of the information that has been incorporated into this prospectus by reference (except exhibits, unless they are specifically incorporated into this prospectus by reference). You should direct any requests for copies to:

Nanogen, Inc.

Attn: General Counsel

10398 Pacific Center Court

San Diego, CA 92121

(858) 410-4600

S-48

Table of Contents

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

SUBJECT TO COMPLETION, DATED JULY 26, 2007

PROSPECTUS

NANOGEN, INC.

\$50,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants to Purchase Common Stock

Warrants to Purchase Preferred Stock

An investment in the securities offered under this prospectus involves a high degree of risk. You should carefully consider the risk factors described in the applicable prospectus supplement and certain of our filings with the Securities and Exchange Commission, as described under Risk Factors on page 2.

We may offer and sell from time to time shares of common stock, shares of preferred stock, debt securities or warrants to purchase shares of common or preferred stock. We may sell any combination of the above described securities, in one or more offerings in amounts, at prices and on terms determined at the time of the offering. The total aggregate public offering price of the securities offered under this prospectus is \$50,000,000.

This prospectus provides you with a general description of the securities that we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add information or update information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the documents incorporated by reference and described under the heading **Where You Can Find More Information** before you make your investment decision.

Our common stock trades on the Nasdaq Global Market under the symbol **NGEN**. On July 25, 2007, the last reported sale price of our common stock on the Nasdaq Global Market was \$1.57. Each prospectus supplement offering any other securities will state whether those securities are listed or will be listed on any national securities exchange, including the Nasdaq Global Market.

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 August 2, 2007.

Table of Contents**TABLE OF CONTENTS**

| | Page |
|---|-------------|
| <u>FORWARD-LOOKING STATEMENTS</u> | i |
| <u>ABOUT THIS PROSPECTUS</u> | 1 |
| <u>NANOGEN, INC.</u> | 1 |
| <u>RISK FACTORS</u> | 2 |
| <u>USE OF PROCEEDS</u> | 2 |
| <u>RATIO OF EARNINGS TO FIXED CHARGES</u> | 2 |
| <u>PLAN OF DISTRIBUTION</u> | 2 |
| <u>THE SECURITIES WE MAY OFFER</u> | 5 |
| <u>DESCRIPTION OF CAPITAL STOCK</u> | 5 |
| <u>DESCRIPTION OF DEBT SECURITIES</u> | 8 |
| <u>DESCRIPTION OF WARRANTS</u> | 9 |
| <u>LEGAL MATTERS</u> | 10 |
| <u>EXPERTS</u> | 10 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | 11 |
| <u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u> | 11 |
| FORWARD-LOOKING STATEMENTS | |

This prospectus and the documents incorporated herein by reference include forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements other than statements of historical fact are forward-looking statements for purposes of these provisions, including any projections of earnings, revenues or other financial items, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding future economic conditions or performance, and any statement of assumptions underlying any of the foregoing. In some cases, forward-looking statements can be identified by the use of terminology such as may, should, could, would, will, believes, intends, expects, plans, estimates, potential, or continue or the negative thereof or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements contained in this prospectus and in the incorporated documents are reasonable, we cannot assure you that such expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from those projected or assumed in the forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including but not limited to those set forth herein under the heading Risk Factors and those discussed in documents we incorporate by reference into this prospectus and for the reasons described elsewhere in this prospectus.

We will not update these forward-looking statements, whether as a result of new information, future events or otherwise. You should, however, review additional disclosures we make in our quarterly reports on Form 10-Q, current reports on Form 8-K and annual reports on Form 10-K filed with the SEC. Readers are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus.

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under this shelf process, we may from time to time sell any combination of securities described in this prospectus in one or more offerings, up to a total dollar amount of \$50,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may, along with information that is incorporated by reference as described under the heading **Where You Can Find More Information**, also add or update information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described below under the heading **Where You Can Find More Information**.

You should rely only on the information contained in or specifically incorporated by reference into this prospectus or a supplement. No dealer, sales person or other individual has been authorized to give any information or to make any representations not contained in this prospectus. If given or made, such information or representations must not be relied upon as having been authorized by us.

This prospectus does not constitute an offer to sell or a solicitation of an offer to buy, the securities offered hereby in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation.

The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of securities. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances, create an implication that there has not been any change in the facts set forth in this prospectus or in our affairs since the date of this prospectus.

NANOGEN, INC.

*The following is only a summary. We urge you to read the entire prospectus, including the more detailed financial statements, notes to the financial statements and other information incorporated by reference from our other filings with the SEC. Investing in our securities involves risk. Accordingly, please carefully consider the information provided under the heading **Risk Factors** on page 2.*

Nanogen is based on the vision of providing a higher quality of healthcare through advanced diagnostic products. Our business strategy is to assemble the companies, products and knowledge base to become a leading supplier of the technologies and products that will help drive a new era of personalized medicine. We were early to recognize that the adoption of personalized medicine is dependent on the advancement of diagnostic technologies. The commercialization of our products and technologies will help bridge the gap between early-stage scientific research and actual clinical practice. We are developing several product lines that are directly targeting specific markets within the advanced diagnostics field that have significant potential for revenue growth. We see recent successes and a growing capability in the clinical laboratories ability to perform accurate advanced diagnostic testing as a strong validation of our strategy. In addition, the U.S. Food and Drug Administration has recently released guidance encouraging the generation of more pharmacogenomics data and molecular diagnostic testing during drug development and clinical trials, and before the use of medications. We believe these applications of advanced diagnostics will help build demand for our products and technologies.

We are incorporated under the laws of the State of Delaware and our stock is listed on the Nasdaq Global Market under the symbol **NGEN**. Our corporate offices are located at 10398 Pacific Center Court, San Diego, California 92121. Our main telephone number is 858-410-4600.

For further information regarding us and our financial information, you should refer to our recent filings with the SEC. See **Where You Can Find More Information** and **Incorporation of Certain Documents by Reference**.

Table of Contents**RISK FACTORS**

An investment in the securities offered through this prospectus involves certain risks. You should carefully consider the specific risks set forth under the caption Risk Factors in the applicable prospectus supplement and under the caption Risk Factors in our filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, incorporated by reference herein, before making an investment decision. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also affect our business operations. To the extent that a particular offering implicates additional significant risks, we will include a discussion of those risks in the applicable prospectus supplement.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we intend to use the net proceeds we receive from sales of the securities covered by this prospectus for working capital, acquisitions and other general corporate purposes, including the development and support of our sales and marketing organization, support for our continuing research and development efforts and, if opportunities arise, to acquire businesses, products, technologies or licenses that are complementary to our business and make strategic investments in businesses complementary to our business. Pending these uses, we intend to invest the net proceeds in short-term, investment grade interest-bearing securities.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges, and our coverage deficiency. We calculated the ratio of earnings to fixed charges by dividing earnings by total fixed charges. Earnings are defined as income (loss) before provision for income taxes and minority interest plus fixed charges less minority interest in pre-tax income of subsidiaries that have not incurred fixed charges. Fixed charges are defined as the sum of interest expensed plus amortized capitalized expenses related to indebtedness plus an estimate of the interest within rental expense. We do not currently have, and during the periods prescribed did not have, any preferred stock outstanding.

| | For Year Ended December 31, | | | | | For Three Months Ended March 31, |
|---|-----------------------------|-------------|-------------|-------------|-------------|---|
| (in thousands, unaudited) | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Ratio of Earnings to Fixed Charges(1) | | | | | | |
| Deficiency of earnings available to cover fixed charges | \$ (24,402) | \$ (32,413) | \$ (38,907) | \$ (96,494) | \$ (49,070) | \$ (11,849) |

(1) For all periods presented, earnings were insufficient to cover fixed charges.

PLAN OF DISTRIBUTION

We may sell the securities being offered by us in this prospectus:

directly to purchasers or investors;

through agents;

through dealers;

through underwriters; or

Table of Contents

through a combination of any of these methods of sale.

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

at a fixed price or prices which may be changed;

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

Offers to purchase securities may be solicited directly by us, or by agents designated by us, from time to time. Any such agent, which may be deemed to be an underwriter as that term is defined in the Securities Act of 1933, as amended (the Securities Act), involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable by us to such agent will be set forth, in the applicable prospectus supplement.

If an underwriter is, or underwriters are, utilized in the offer and sale of securities in respect of which this prospectus and the accompanying prospectus supplement are delivered, we will execute an underwriting agreement with such underwriter(s) for the sale to it or them, and the name(s) of such underwriter(s) and the terms of the transaction, including any underwriting discounts and other items constituting compensation of the underwriters and dealers, if any, will be set forth in such prospectus supplement, which will be used by the underwriter(s) to make resales of the securities in respect of which this prospectus and such prospectus supplement are delivered to the public. The securities will be acquired by the underwriters for their own accounts and may be sold by the underwriters 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. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

We may sell directly to, and solicit offers from institutional investors, individuals, or the public. We will describe the terms of any such sales in a prospectus supplement.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale. The name of the dealer and the terms of the transaction will be identified in the applicable prospectus supplement.

If an agent is used in an offering of securities being offered by this prospectus, the agent will be named, and the terms of the agency will be described, in the applicable prospectus supplement relating to the offering. Unless otherwise indicated in the prospectus supplement, an agent will act on a best efforts basis for the period of its appointment.

If indicated in the applicable prospectus supplement, we will authorize underwriters or their agents to solicit offers by certain institutional investors to purchase our securities pursuant to contracts providing for payment and delivery at a future date. Institutional investors with which these contracts may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others. In all cases, these purchasers must be approved by us. The obligations of any purchaser under any of these contracts will not be subject to any conditions except that (a) the purchase of the securities must not at the time of delivery be prohibited under the laws of any jurisdiction to which that purchaser is subject and (b) if the securities are also being sold to underwriters, we must have sold to these underwriters the securities not subject to delayed delivery. Underwriters and other agents will not have any responsibility in respect of the validity or performance of these contracts.

Table of Contents

Certain of the underwriters, dealers or agents utilized by us in any offering may be customers of, including borrowers from, engage in transactions with, and perform services for us or one or more of our affiliates in the ordinary course of business. Underwriters, dealers, agents and other persons may be entitled, under agreements which may be entered into with us, to indemnification against and contribution toward certain civil liabilities, including liabilities under the Securities Act. The terms of any indemnification provisions will be set forth in a prospectus supplement.

Until the distribution of the securities is completed, rules of the SEC may limit the ability of the underwriters and certain selling group members, if any, to bid for and purchase the securities. As an exception to these rules, the representatives of the underwriters, if any, are permitted to engage in certain transactions that stabilize the price of the securities in accordance with Regulation M, but only in the case of a fixed-price offering. Such transactions may consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of the securities.

If underwriters create a short position in the securities in connection with the offering thereof (i.e., if they sell more securities than are set forth on the cover page of the applicable prospectus supplement), the representatives of such underwriters may reduce that short position by purchasing securities in the open market. Any such representatives also may elect to reduce any short position by exercising all or part of any over-allotment option described in the applicable prospectus supplement.

The maximum commission or discount to be received by any member of the National Association of Securities Dealers, Inc. or independent broker-dealer will not be greater than 8% of the initial gross proceeds of any security being sold.

Any such representatives also may impose a penalty bid on certain underwriters and selling group members. This means that if the representatives purchase securities in the open market to reduce the underwriters' short position or to stabilize the price of the securities, they may reclaim the amount of the selling concession from the underwriters and selling group members who sold those shares as part of the offering thereof.

In general, purchases of a security for the purpose of stabilization or to reduce a syndicate short position could cause the price of the security to be higher than it might otherwise be in the absence of such purchases. The imposition of a penalty bid might have an effect on the price of a security to the extent that it were to discourage resales of the security by purchasers in the offering.

Neither we nor any of the underwriters, if any, makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the securities. In addition, neither we nor any of the underwriters, if any, makes any representation that the representatives of the underwriters, if any, will engage in such transactions or that such transactions, once commenced, will not be discontinued without notice.

Each series of securities covered by this prospectus would be a new issue with no established trading market, other than our common stock which is listed on the Nasdaq Global Market. Any shares of common stock sold pursuant to a prospectus supplement will be listed on the Nasdaq Global Market or a stock exchange on which the common stock offered is then listed, subject (if applicable) to an official notice of issuance. Any underwriters for whom securities are sold by us for public offering and sale may make a market in the securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. The securities other than the common stock may or may not be listed on a national securities exchange or eligible for quotation or trading on the Nasdaq Global Market. Therefore, we cannot provide any assurance to you concerning the liquidity of any of the securities covered by this prospectus.

Under the securities laws of some states, the securities registered by the registration statement that includes this prospectus may be sold in those states only through licensed brokers or dealers.

Table of Contents

THE SECURITIES WE MAY OFFER

We may sell from time to time, in one or more offerings:

common stock;

preferred stock;

debt securities;

warrants to purchase shares of common stock; and

warrants to purchase shares of preferred stock.

The aggregate initial offering price of the offered securities will not exceed \$50,000,000.

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize all the material terms and provisions of the various types of securities that we may offer. We will describe the particular terms of any securities offered in a prospectus supplement. If we so indicate in a prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement the securities exchange or market, if any, on which the securities will be listed or quoted.

DESCRIPTION OF CAPITAL STOCK

The following summary of terms of our common stock and preferred stock, together with any additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of these securities, but is not complete. For the complete terms of our common stock and preferred stock, please refer to our certificate of incorporation and our bylaws that are incorporated by reference into the registration statement which includes this prospectus and, with respect to preferred stock, to any certificate of designation that we may file with the SEC for a series of preferred stock we may designate, if any.

We will describe in a prospectus supplement the specific terms of any common stock or preferred stock we may offer pursuant to this prospectus. If indicated in a prospectus supplement, the terms of such common stock or preferred stock may differ from the terms described below.

We are authorized to issue 135,000,000 shares of common stock, par value of \$0.001 per share, and 5,000,000 shares of preferred stock, par value of \$0.001 per share, 100,000 shares of which have been designated Series A participating preferred stock. As of the close of business on July 23, 2007, there were outstanding:

72,819,006 shares of common stock outstanding; and

no shares of preferred stock.

Common Stock

Each share of our common stock entitles the holder to one vote on all matters submitted to a vote of stockholders, including the election of directors. Subject to any preference rights of holders of preferred stock, the holders of common stock are entitled to receive dividends, if any,

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declared from time to time by the directors out of legally available funds. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after the payment of liabilities, subject to any rights of holders of preferred stock to prior distribution.

The common stock has no preemptive or conversion rights or other subscription rights. No redemption or sinking fund provisions apply to the common stock.

Table of Contents

Our common stock is traded under the symbol **NGEN** on the Nasdaq Global Market. The transfer agent and registrar for our common stock is Computershare.

Preferred Stock

Rights Plan

We have adopted a stockholders' rights plan that enables the Nanogen board to deter coercive or unfair takeover tactics and to prevent a person or a group from gaining control of Nanogen without offering a fair price to all stockholders. In connection with the adoption of the plan, our Board of Directors designated 100,000 shares as Series A participating preferred stock. The plan provided for a dividend of one preferred stock purchase right for each share of common stock to stockholders of record on November 30, 1998. Each right entitles such stockholders to buy one one-thousandth of a share of series A participating preferred stock of Nanogen at an exercise price of \$50.00, subject to antidilution adjustments. The rights are exercisable only if a person or group becomes the beneficial owner of 15% or more of the common stock, or commences a tender or exchange offer which would result in the offeror beneficially owning 15% or more of common stock, which is not approved by Nanogen's board of directors. Nanogen's board and the rights agent have the authority to amend the plan. Thus, Nanogen's stockholders' rights plan compels any prospective acquiror of 15% or more of Nanogen's stock to negotiate with Nanogen's board before completing a proposed acquisition. On December 12, 2000, Nanogen's board of directors amended the rights plan to allow Citigroup Inc. to acquire the beneficial ownership of up to 25% of the outstanding Nanogen common stock without triggering the ability of Nanogen's stockholders to exercise the rights governed by the rights plan. The board of directors is entitled to redeem the rights at \$0.01 per right at any time prior to the public announcement of the existence of a 15% holder. The rights expire on the earlier of (i) November 17, 2008, (ii) certain permitted merger transactions, or (iii) redemption or exchange as described in the rights plan. Until a right is exercised, the holder has no rights as a stockholder.

Undesignated Shares

Under Delaware law and our certificate of incorporation, our board of directors is authorized, without shareholder approval, to issue shares of preferred stock from time to time in one or more series. Our board of directors may fix the rights, preferences, privileges and restrictions of this stock. Some of the rights, preferences and privileges that our board of directors may designate include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and sinking fund terms. Our board of directors may determine the number of shares constituting any series or the designation of such series. Any or all of the rights, preferences and privileges selected by the board of directors may be greater than the rights of the common stock.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the applicable prospectus supplement and will file a copy of the certificate of designation establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

the title and stated value;

the number of shares offered, the liquidation preference per share and the offering price;

the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends accumulate;

the provisions for any sinking fund, if any;

the provisions for redemption, if any;

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any listing of the preferred stock on any securities exchange or market;

whether preferred stock will be convertible into or exchangeable for our common stock or other of our securities, and, if applicable, the conversion or exchange price (or how it will be calculated) and conversion or exchange period;

Table of Contents

voting rights, if any;

if appropriate, a discussion of any applicable U.S. Federal income tax considerations;

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

any other specific terms, preferences, rights, limitations or restrictions.

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

Warrants

As of July 23, 2007, warrants to purchase 3,133,366 shares of common stock were outstanding. These warrants have a weighted average exercise price of \$4.12 per share and expire between 2008 and 2012.

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

Provisions of our certificate of incorporation and bylaws may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. Our certificate of incorporation and bylaws eliminate the right of stockholders to call special meetings of stockholders or to act by written consent without a meeting and require advance notice for stockholder proposals and director nominations, which may preclude stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders. Our certificate of incorporation includes provisions classifying the board of directors into three classes with staggered three-year terms. In addition, our directors may only be removed from office for cause. Under our certificate of incorporation and bylaws, the board of directors determines the size of the board and may fill vacancies on the board. The authorization of undesignated preferred stock makes it possible for our board of directors, without obtaining further stockholder approval, to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of us.

In addition, we are subject to Section 203 of the Delaware General Corporation Law which, subject to certain exceptions, generally prohibits a Delaware corporation from engaging in any business combinations with any interested stockholder, unless:

prior to the business combination, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85 percent of our voting stock outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding:

shares owned by persons who are directors and also officers; and

shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

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at or after the time the stockholder became an interested stockholder, the business combination is:

approved by our board of directors; and

Table of Contents

authorized at an annual or special meeting of our stockholders, and not by written consent, by the affirmative vote of at least 66²/₃ percent of our outstanding voting stock that is not owned by the interested stockholder.

In general, the Delaware General Corporation Law defines an interested stockholder to be an entity or person that beneficially owns 15 percent or more of the outstanding voting stock of the corporation or any entity or person that is an affiliate or associate of such entity or person. The Delaware General Corporation Law generally defines business combination to include the following:

any merger or consolidation involving the corporation and the interested stockholder;

any sale, lease, exchange, mortgage, pledge, transfer or other disposition of 10 percent or more of the assets of the corporation or its majority-owned subsidiary that involves the interested stockholder;

subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

subject to certain exceptions, any transaction involving the corporation that has the effect of increasing the interested stockholder's proportionate share of the stock of any class or series of the corporation; and

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.

DESCRIPTION OF DEBT SECURITIES

The following description, together with any additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus, but is not complete. As used in this prospectus, "debt securities" means the debentures, notes, bonds and other evidences of indebtedness that we may issue from time to time. The debt securities may be either secured or unsecured and will be either senior debt securities or subordinated debt securities. The debt securities will be issued under one or more separate indentures between us and a trustee to be specified in an accompanying prospectus supplement. The indentures will be qualified under the Trust Indenture Act of 1939 and filed with the SEC. As used in this registration statement, the term "debt trustee" refers to the senior trustee or the subordinated trustee, as applicable.

The general provisions of debt securities to be offered are described in a form of indenture, which is filed as an exhibit to the registration statement of which this prospectus is a part. The particular terms of any debt securities offered and the extent, if any, to which the general provisions may not apply to debt securities so offered will be described in the applicable prospectus supplement relating to the debt securities and a supplemental indenture to be filed with the SEC. For a more detailed description of the terms of the debt securities, please refer to the indenture relating to the issuance of a particular debt security.

Additional Information

We will describe in the applicable prospectus supplement the following terms relating to a series of debt securities:

the title;

any limit on the amount that may be issued;

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whether or not we will issue the series of debt securities in global form, and, if so, the terms and the name of the depository;

the maturity date;

Table of Contents

the 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 securities;

classification as senior or subordinated debt securities;

in the case of subordinated debt securities, the degree, if any, to which the subordinated debt securities of the series will be senior to or be subordinated to other indebtedness of our in right of payment, whether the other indebtedness is outstanding or not;

the terms on which any series of debt securities may be convertible into or exchangeable for our common stock or other of our securities, including (a) provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option and (b) provisions pursuant to which the number of shares of common stock or other securities of ours that the holders of the series of debt securities receive would be subject to adjustment;

the place where payments will be payable;

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 redemption provisions;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities;

whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;

whether we will be restricted from incurring any additional indebtedness;

any listing of a series of debt securities on a securities exchange or market;

if appropriate, a discussion of any applicable United States federal income tax considerations;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

DESCRIPTION OF WARRANTS

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We may issue warrants for the purchase of preferred stock or common stock. The warrants may be issued independently or together with any other securities and may be attached to or separate from the other securities. Each series of warrants may be issued under a separate warrant agreement.

This summary of some provisions of the warrants is not complete. You should refer to the warrant agreement relating to the specific warrants being offered for the complete terms of the warrants. The warrant agreements will be filed with the SEC in connection with the offering of the specific warrants.

The prospectus supplement relating to a series of warrants will describe the specific terms of the warrants including the following:

the title of the warrants;

the aggregate number of warrants;

Table of Contents

the price or prices at which the warrants will be issued and the currency in which the price for the warrants may be paid;

the securities (which may include shares of common stock or preferred stock) for which the warrants are exercisable;

the number of shares of common stock or preferred stock for which each warrant is exercisable;

the exercise price for the warrants, including provisions for any changes to or adjustments in the exercise price;

if applicable, the designation and terms of the series of preferred stock with which the warrants are issued;

if applicable, the date on and after which the warrants and any related common stock or preferred stock will be separately transferable;

any listing of the warrants on a securities exchange or market;

the date on which the right to exercise the warrants shall commence and the date on which such right shall expire and whether the exercise of warrants will be at the option of holders at our option, or automatic;

whether the warrants are exercisable by payment of cash, surrender of other securities, or both;

if applicable, the minimum or maximum amount of the warrants which may be exercised at any one time;

whether the warrants will be issued in registered form or bearer form;

information with respect to book-entry procedures; if any;

if appropriate, a discussion of applicable United States federal income tax considerations; and

any other terms of the warrants, including terms, procedures and limitations relating to the transferability, exchange or exercise of such warrants.

Prior to the exercise of any warrants to purchase preferred stock or common stock, holders of the warrants will not have any of the rights of holders of the preferred stock or common stock purchasable upon exercise, including the right to vote or to receive any payments of dividends on the preferred stock or common stock purchasable upon exercise.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Morgan, Lewis & Bockius LLP, San Francisco, California.

EXPERTS

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The consolidated financial statements of Nanogen, Inc. appearing in Nanogen, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2006 (including schedules appearing therein), and Nanogen, Inc. management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2006 included therein (which did not include an evaluation of the internal control over financial reporting of Spectral or Amplimedical), have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in its reports thereon, which as to the report on internal control over financial reporting contains an explanatory paragraph describing the above referenced exclusion of Spectral or Amplimedical from the scope

Table of Contents

of management's assessment and such firm's audit of internal control over financial reporting, included therein, and incorporated herein by reference. Such financial statements and management's assessment have been incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement that we filed with the SEC. The registration statement that contains this prospectus, including the exhibits to the registration statement, contains additional information about us and the securities offered by this prospectus.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our public filings, including reports, proxy and information statements, are also available on the SEC's web site at <http://www.sec.gov>.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference information from other documents that we file with them, which means that we can disclose important information by referring to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference into this prospectus the documents listed below, and any future filings (other than the portions thereof deemed to be furnished to the SEC pursuant to Item 2.02 or Item 7.01 of Current Report on Form 8-K) we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, until we have sold all of the securities to which this prospectus relates or the offering is otherwise terminated, including any such filing prior to the effectiveness of this registration statement:

our quarterly report on Form 10-Q for the quarter ended March 31, 2007, filed with the SEC on May 10, 2007;

our annual report on Form 10-K for the year ended December 31, 2006, filed with the SEC on March 16, 2007;

our current report on Form 8-K filed with the SEC on June 15, 2007;

our current report on Form 8-K filed with the SEC on May 3, 2007;

our current report on Form 8-K filed with the SEC on February 23, 2007;

our current report on Form 8-K filed with the SEC on February 5, 2007; and

the description of our common stock contained in our registration statement on Form 8-A filed under Section 12(g) of the Securities Exchange Act of 1934 with the SEC on April 7, 1998, including any amendment or reports filed for the purpose of updating such description.

To the extent that any statement in this prospectus is inconsistent with any statement that is incorporated by reference and that was made on or before the date of this prospectus, the statement in this prospectus shall supersede such incorporated statement. The incorporated statement shall not be deemed, except as modified or superseded, to constitute a part of this prospectus or the registration statement. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of each contract or document filed as an exhibit to the registration statement.

Table of Contents

We will furnish without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request, a copy of the information that has been incorporated into this prospectus by reference (except exhibits, unless they are specifically incorporated into this prospectus by reference). You should direct any requests for copies to:

Nanogen, Inc.

Attn: General Counsel

10398 Pacific Center Court

San Diego, CA 92121

(858) 410-4600

Table of Contents

\$50,000,000

NANOGEN, INC.

PROSPECTUS

COMMON STOCK

PREFERRED STOCK

DEBT SECURITIES

WARRANTS TO PURCHASE COMMON STOCK

WARRANTS TO PURCHASE PREFERRED STOCK

August 2, 2007